Phase II Site Assessment Report

Riverfront Park
Spokane, Washington

for
City of Spokane Parks and Recreation

November 28, 2016

GeoEngineers
Earth Science + Technology

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File No. 0110-148-06

November 28, 2016

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ACRONYMS AND ABBREVIATIONS

bgs – below ground surface

BTEX – benzene, toluene, ethylbenzene and xylene

City – City of Spokane

COCs – contaminants of concern

DOT – U.S. Department of Transportation

DRPH – diesel-range petroleum hydrocarbons

Ecology – Washington State Department of Ecology

EPA – Environmental Protection Agency

ESA – environmental site assessment

eV – electron volt

GeoEngineers – GeoEngineers, Inc.

GPS – global positioning system

GRPH – gasoline-range petroleum hydrocarbons

HSA – hollow-stem auger

IDW – Investigation-derived waste

MDL – method detection limit

mg/kg – milligrams per kilogram

MRL – Method Reporting Limit

MTCA – Model Toxics Control Act

ORPH – oil-range petroleum hydrocarbons

PAHs – polycyclic aromatic hydrocarbons

Park – Riverfront Park

PCBs – polychlorinated biphenyls

PID – photoionization detector

ppm – parts per million

QA/QC – Quality Assurance/Quality Control

RCRA – Resource Conservation and Recovery Act

SVOC – Semivolatile organic compound

TCLP – Toxicity Characteristic Leaching Procedure

TEQ – toxicity equivalent quotient

TestAmerica – TestAmerica Laboratories, Inc.

ACRONYMS AND ABBREVIATIONS (Continued)

TPH – total petroleum hydrocarbons

UST – underground storage tank

VOCs – volatile organic compounds

XRF – x-ray fluorescence

1.0 INTRODUCTION

This report describes subsurface soil assessment activities at Riverfront Park in downtown Spokane, Washington (herein designated "site") located as shown in the attached Vicinity Map, Figure 1. GeoEngineers' services were performed under the City of Spokane's (City) contract number OPR2016-0696, amendment No. 1 which was authorized October 3, 2016. This soil assessment was conducted in support of proposed redevelopment activities at Riverfront Park (Park).

2.0 SITE DESCRIPTION AND BACKGROUND

2.1. Site History

The project site is located at 507 North Howard Street, in Spokane, Washington and is bound by Spokane Falls Boulevard to the south, Post Street to the west, Division Street to the east and West Cataldo Avenue to the north. The property is currently owned by the City and used as a public park and outdoor recreation area. The site includes portions of Havermale Island, Canada Island and areas on the north and south banks of the Spokane River (Figure 1).

Development in the Riverfront Park area began in the late 1870s. The falls were the source of early power for industries in the city, then known as Spokane Falls. Factories, mills (flour and lumber) and various commercial, industrial and railroad properties near the project site were constructed in the 1880s to harness the power of the falls.

Several commercial buildings including a paint shop were present on the South Bank of the Spokane River in the 1880s. The Great Fire of August 4, 1889, destroyed much of downtown Spokane, and several buildings within the current extents of the Park. The area was rebuilt after the fire and by about 1900, additional development had occurred along the South Bank. This new development consisted predominantly of City/municipal buildings. Substantially more development occurred by about 1910 in the Park area including several paint shops and printing facilities near the southwest portion of the Park.

Development and building density on the subject property increased from approximately 1884 to 1910 on Havermale Island and the North Bank. Railroad trestles were present on the South Bank of the Spokane River. From 1910 through 1970 the building density in these areas remains similar, though the occupants of some buildings change. By 1929, the area currently occupied by the subject property was almost completely developed with buildings and railroad infrastructure. Mill activities utilized the channel between the South Bank and Havermale Island to transport logs down the river and store them for mill use. A 1960 photograph shows that many of the buildings on Havermale Island had been demolished and parking areas occupied most of the island. By 1970 a railroad depot was located on Havermale Island. The City acquired the railroad properties located in the area of the Park in 1972. The railroad yards and industrial structures on Havermale Island were removed by 1973 according to a vertical file from the Spokane Public Library's Northwest Room.

Riverfront Park as it is today was constructed to host the World's Fair of 1974 (Expo '74). Construction for Expo '74 began in 1973 and the existing structures on the islands and South Bank were demolished except for the clock tower on Havermale Island. Plans for Expo '74 called for a radical alteration of the Park area, including site elevations (Youngs 1996). It was estimated that large amounts of fill (including topsoil) would

be needed to grade the Park before Expo '74 construction and according to one source (Youngs 1996), at least 200,000 cubic yards of fill was used in support of Expo construction. It is unknown how much fill was used, but aerial photographs and Sanborn maps indicate that large portions of the Park were altered with fill. Temporary buildings constructed for Expo '74 were largely demolished within about a year after Expo '74. Relatively few changes were made to the Park between removal of the temporary buildings from Expo '74 and the present day, except for the removal of almost 17 acres of asphalt, concrete and pavement that covered the subject property at the time of Expo '74.

As a result of a municipal bond passed in 2014, the Park is undergoing redevelopment and many improvements are planned throughout the site. Anticipated improvements include the replacement of multiple bridges, construction of new facilities for the Looff Carousel and Skyride, a new ice ribbon in the current Gondola Meadow, redevelopment of the pavilion area, a reduction in elevation through the Central Green and construction of at least two new playgrounds including one by the Theme Stream and a second larger one along the North Bank. Locations of proposed Park improvements are provided on Proposed Park Improvement Areas, Figure 2.

2.2. Previous Investigations

Previous investigations at the Park included a Phase II Environmental Site Assessment (ESA) along the North Bank by CH2M in 2000 (CH2MHill 2000) and a Phase I ESA by GeoEngineers in 2014 (GeoEngineers 2014). Combined geotechnical evaluations and environmental assessments were also conducted by GeoEngineers for the Ice Ribbon (GeoEngineers 2016a) and the Looff Carousel (GeoEngineers 2016c) along the South Bank. GeoEngineers also conducted a Phase I ESA for the Park in 2014 (GeoEngineers 2014). Brief descriptions of the Phase II investigation results are provided in the following sections.

2.2.1. North Bank

In 2000, CH2M Hill excavated 14 test pits in the North Bank area (CH2M 2000). Soil samples collected from 13 of the test pits were submitted for chemical analysis including:

- Lead;
- Cadmium;
- Volatile organic compound (VOCs); and
- Semivolatile organic compound (SVOCs).

Analysis results indicated concentrations of lead, cadmium and polycyclic aromatic hydrocarbons (PAHs) were greater than the Model Toxics Control Act (MTCA) Method A cleanup levels in some of the samples analyzed. This includes:

- Lead - TP-2, TP-7, TP-8 and TP-9.
- Cadmium – TP-9
- PAHs – TP-8

Analysis results are summarized in Analytical Results – CH2M Hill Test Pit Soil Samples from 2000, Table 1 and test pit locations are identified as TP-1 through TP-14 in Exploration Locations with Analytical Results: North Bank, Figure 3.

2.2.2. South Bank

In 2016, GeoEngineers conducted two separate Geotechnical Engineering Evaluations and Environmental Site Assessments. One study was conducted to support design of the proposed Ice Ribbon and Skyride Facility (GeoEngineers 2016a). The second study was conducted to support design of the Looff Carousel (GeoEngineers 2016c). Chemical analysis of soils included:

- Petroleum Hydrocarbons;
- Resource Conservation and Recovery Act (RCRA) 8 Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver); and
- PAHs.

As a result of initial testing, some of the samples were also analyzed for polychlorinated biphenyls (PCBs) and toxicity characteristic leaching procedure (TCLP) analysis for arsenic, cadmium and lead. The following sections summarize the chemical analysis results for the Ice Ribbon and Looff Carousel.

2.2.2.1. Ice Ribbon and Skyride Facility

In April 2016, 16 hollow stem auger (HSA) borings were advanced to characterize site soil as part of the geotechnical evaluation and environmental assessment for the Ice Ribbon and Skyride Facility (GeoEngineers 2016a). In addition, five shallow soil samples (less than 12 inches below ground surface [bgs]) were collected using a stainless steel shovel. Seven samples collected from the HSA borings and each of the shallow soil samples were submitted for chemical analysis. The results of the environmental assessment for the Ice Ribbon and Skyride Facility identified lead greater than the MTCA Method A cleanup level in two samples (B-13 and B-18). Oil-range petroleum hydrocarbons (ORPH), arsenic and cadmium were also greater than MTCA Method A cleanup levels in B-13. PAHs were greater than the MTCA Method A cleanup level in each of the seven soil samples collected from the HSA borings. Chemical analysis of the shallow soil samples did not indicate contaminants of concern (COCs) greater than MTCA Method A cleanup levels.

2.2.2.2. Looff Carousel

In May 2016, eight HSA borings were advanced to characterize site soil as part of the geotechnical evaluation and environmental assessment for the Looff Carousel (GeoEngineers 2016c). Four samples collected from the HSA borings were submitted for chemical analysis. The results of the environmental assessment for the Looff Carousel identified PAHs, ORPH and lead greater than the MTCA Method A cleanup levels in one sample (LC-4). LC-1 and LC-2 also had PAHs greater than the MTCA Method A cleanup level. Additional chemical analysis indicated COCs were less than MTCA Method A cleanup levels.

3.0 SCOPE OF SERVICES

To characterize site soils within the redevelopment areas and identify potential contaminants, 40 direct-push soil borings (DP-1 through DP-40) were advanced within the proposed Park improvement areas. Boring locations were identified on aerial figures by GeoEngineers and the City and then adjusted as

necessary in the field to address site utilities and access restraints. After locations were finalized the direct boring were advanced between September 20 and 22, 2016. The soil recovered was field screened and discrete soil samples collected from the borings were submitted for laboratory chemical analysis. The field program and chemical analytical results were then summarized in this report.

4.0 FIELD ACTIVITIES

The direct push soil borings were marked in the field using a hand-held iPad with global positioning system (GPS) software which has a horizontal accuracy of approximately ± 10 feet. A private utility locator (Advanced Underground Utility Locating, Inc.) located site utilities near proposed boring locations before drilling activities commenced. Soil borings were advanced by ESN Northwest and GeoEngineers observed boring advancement, documented soil boring activities and collected soil samples from each boring. Soil samples were field screened and submitted to TestAmerica Laboratories, Inc. (TestAmerica) for chemical analysis. Soil boring locations are shown on Exploration Locations with Analytical Results: North Bank, Canada Island and Central Green and Theme Stream, Figures 3 through 5, respectively.

Boring logs are provided in Appendix A, Figures A-2 through A-41. Each of the 40 borings were advanced using a truck-mounted Geoprobe® 7800. The following field process was conducted by GeoEngineers during the drilling additivities:

- Notifying the Call-Before-You-Dig utility notification service before drilling activities begin.
- Subcontracting a private utility locator before drilling to identify potential unmarked utilities within approximately 20 feet of each boring.
- Advancing 40 direct-push soil borings (DP-1 through DP-40);
- Borings were advanced to refusal or a depth of approximately 15 bgs, whichever was encountered first. Borings were backfilled with bentonite upon completion. If refusal was reached shallower than 5 feet bgs, the drill rig was moved a few feet and a second attempt at that boring was made. If the second attempt was unsuccessful at reaching the anticipated depth bgs, drilling activities were ceased for that location.
- Observing and documenting subsurface soil conditions for each boring.
- Collecting continuous soil samples during boring advancement. Discreet samples were collected and field screened using visual observations, water sheen testing, and headspace vapor measurements to evaluate soils for the presence of petroleum or VOCs contamination.
- Screening soil samples in the field using an x-ray fluorescence (XRF) instrument to estimate arsenic, cadmium and lead concentrations in each boring.
- Placing investigation-derived waste (IDW), into drums. IDW generally consisted of excess drill cuttings and decontamination water. The IDW was drummed, labeled and stored on-site.
- Collecting discrete soil samples and placing them into coolers with ice. Soil samples were placed into coolers containing ice and delivered to TestAmerica under chain-of-custody for laboratory chemical analysis. The samples which indicated the greatest contamination using field screening were submitted for laboratory analysis. In the event that field screening methods did not detect contamination, then

the sample from approximately 3 to 4 feet bgs was submitted for laboratory analysis of the following COCs:

- Petroleum hydrocarbons using Northwest Method NWTPH-HCID;
- PAHs using Environmental Protection Agency (EPA) Method 8270 SIM; and
- RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver) using EPA 6000/7000 Series Methods.

If screening indicated the presence of VOCs, the sample was also submitted for VOC analysis using method 8260c.

- As a result of the initial laboratory testing, follow up analysis was conducted in accordance with the site Soil Management Plan (GeoEngineers 2016b). Follow up analysis included:
  - Diesel-and oil-range petroleum hydrocarbons (DRPH and ORPH, respectively) using Northwest Method NWTPH-Dx;
  - TCLP for metals using EPA 6010C Methods; and
  - PCBs using EPA Method 8082A.

5.0 SUBSURFACE CONDITIONS

The following sections describe general subsurface conditions in four distinct areas of Riverfront Park:

- The North Bank;
- Canada Island;
- The Central Green; and
- The Theme Stream.

5.1. North Bank

Direct-push borings DP-1 through DP-21 were advanced in the North Bank area. A basalt outcrop is present in the North Bank that provides approximately 20 feet of vertical relief between two parking lots owned by the City and identified as part of Riverfront Park. Sand and gravel along with debris (concrete and brick) was generally encountered over basalt bedrock in the North Bank area. Exploration results generally indicated shallower refusal depths closer to the basalt outcrop and deeper refusal depths to the south and east of the outcrop. These refusal depths indicate the North Bank basalt bedrock generally increases in depth towards the river bank (south) from about 3 to greater than 15 feet bgs. Above the basalt bedrock, subsurface soil generally consisted of gravel with sand and areas of increased sand content.

Groundwater was encountered in only one boring (DP-1) in the North Bank. Groundwater was encountered at a depth of approximately 3 feet bgs, which was 1 foot above the bottom of the boring.

5.2. Canada Island

Direct-push borings DP-22 through DP-25 were advanced on Canada Island. The boring logs generally indicate the surface is underlain by sand and gravel with debris fill encountered at depths up to about 10 feet bgs. Groundwater was not encountered in the borings on Canada Island.

5.3. Central Green

Direct push borings DP-26, DP-27, DP-29, DP-30 and DP-34 through DP-40 were advanced in the Central Green area. Samples obtained from these borings indicate the area is underlain by sand and gravel. Debris including concrete, brick and asphalt was encountered at various depths, but was common in the explorations at depths of up to about 10 feet.

Groundwater was encountered in five of the borings in the Central Green. This includes:

- DP-35;
- DP-37;
- DP-38;
- DP-39; and
- DP-40.

Groundwater was encountered at approximately 12½ to 15 feet bgs in these borings. The borings where groundwater was encountered are generally along the eastern extents of the explorations. Although the other borings in the area did not encounter groundwater, they were terminated at depths of about 15 feet bgs and it is possible that groundwater is present below the boring termination depths.

5.4. Theme Stream

Direct push borings DP-28 and DP-31 through DP-33 were advanced in the Theme Stream area. Sand and gravel along with debris was commonly encountered in the borings at depths of about 5 feet. Borings in the Theme Stream area, were terminated at depths of about 9½ to 14 feet bgs as the probe encountered subsurface material it could not advance past. Groundwater was not encountered in the borings near the Theme Stream.

6.0 CHEMICAL ANALYTICAL RESULTS

The following provides information of the chemical analysis of the soils collected and analyzed from the direct push borings. Laboratory chemical analytical results are discussed in Section 6.1. Field measured XRF metal concentrations are discussed in Section 6.2. Chemical analysis results are summarized in Soil Chemical Analytical Data, Tables 2 through 5 and compared to field XRF readings in Soil XRF and Laboratory Metals Results, Table 6. Laboratory analytical reports and a data validation report are included in Appendix B.

6.1. Soil Chemical Analytical Results

Soil samples from each of the 40 borings (DP-1 through DP-40) were submitted to TestAmerica for laboratory chemical analysis. As a result of field observations and suspected contamination, an additional soil sample was also analyzed from borings DP-1, DP-29, DP-35 and DP-38. Soil samples were placed in coolers with ice after sampling and then delivered to the laboratory under chain of custody protocol.

Soil analytical results are summarized and compared to MTCA Method A cleanup levels in Tables 2 and 3. Spatial representation of the various COCs and boring locations are provided in Figures 3 through 5.

6.1.1. Petroleum Range Hydrocarbons

Petroleum hydrocarbon contamination greater than the MTCA Method A cleanup level for ORPH was observed in the following locations:

- The northeast region of the North Bank (DP-1 and DP-16);
- The southwest region of the North Bank along the Howard Street Corridor (DP-19, DP-20 and DP-21);
- On Canada Island along the Howard Street Corridor (DP-22 and DP-23); and
- Near the center of the explorations in the Central Green (DP-35 and DP-36).

Gasoline-range petroleum hydrocarbons (GRPH) were not observed greater than laboratory reporting levels. DRPH greater than the MTCA Method A cleanup level was observed in the northeast region of the North Bank in DP-1 and DP-16. The following sections provide additional information on the specific hydrocarbon analysis.

6.1.1.1. TPH (GRPH, DRPH and ORPH) - Northwest Method NWTPH-HCID

Soil samples were initially analyzed for petroleum hydrocarbon contamination using the NWTPH-HCID method. The NWTPH-HCID method is a low cost qualitative test that can be used to test for the presence or absence of GRPH, DRPH and ORPH. If petroleum hydrocarbon concentrations were detected greater than one-half the MTCA Method A cleanup level using the HCID analysis method, then the sample was re-analyzed for the specific range of hydrocarbons detected using more precise analytical methods (See Section 6.1.1.2). In each of the 43 samples analyzed using the NWTPH-HCID method, GRPH was not detected greater than laboratory reporting limits and therefore additional analysis for GRPH was not conducted.

DRPH and ORPH was detected in 13 and 30 of the soil samples analyzed respectively. As a result of the HCID analysis, 11 soil samples were reanalyzed using the NWTPH-Dx method to determine more precise DRPH and ORPH concentrations.

6.1.1.2. DRPH and ORPH - Northwest Method NWTPH-Dx

Follow up analysis using the NWTPH-Dx method indicated that three samples exceeded MTCA Method A cleanup levels for DRPH and 10 samples exceeded MTCA Method A cleanup levels for ORPH. Each location that exceeded the MTCA Method A cleanup level for DRPH also exceeded for ORPH using the NWTPH-Dx method.

6.1.2. Metals

Metals contamination greater than the MTCA Method A cleanup level for lead was observed in the following locations:

- The eastern region of the North Bank (DP-3, DP-6, DP-15 and DP-17);
- One location on Canada Island (DP-25);
- One location near the Theme Stream (DP-32); and
- One location in the Central Green (DP-38).

Cadmium was also reported greater than the MTCA Method A cleanup level in the Central Green sample from DP-38. Each of the other metals analyzed for were less than the MTCA Method A cleanup levels (when available). Although the areas where sample results exceeded MTCA Method A cleanup levels for metals were generally limited to lead along the North Bank, chemical analysis of the soil generally indicated cadmium, lead and mercury were commonly greater than background metals concentrations for the Spokane Basin (Ecology 1994). The aerial extents of metals contamination were not well defined and appeared distributed throughout the area.

6.1.2.1. Total Metals

Each of the 43 samples were submitted for metals analysis using EPA Method 6010C (arsenic, barium, cadmium, chromium, lead, selenium and silver) and EPA Method 7471B (mercury). As a results of required dilutions for chemical analysis, the cadmium results were reported to the method detection limit (MDL) and not the laboratory reporting limits to meet the MTCA Method A Cleanup level. As a result of the chemical analysis the following metals were greater than their respective MTCA Method A cleanup levels:

- Cadmium: DP-2, DP-3, DP-6, DP-17 and DP-38
- Lead: DP-4, DP-6, DP-15, DP-17, DP-25, DP-32 and DP-38

It should be noted that cadmium concentrations for DP-2, DP-3, DP-6 and DP-17 were greater than the MTCA Method A cleanup level of 2 milligrams per kilogram (mg/kg), but less than 3 mg/kg.

6.1.2.2. TCLP

As a result of the total metals concentrations, one sample for chromium and seven samples for lead were reanalyzed using the TCLP test method. TCLP testing generally was conducted when soil metal concentrations were greater than 20 times the TCLP regulatory level. In the instance of lead, not every sample which exceeded 100 mg/kg was tested for TCLP, but a range of lead concentrations was selected to reduce analytical costs and develop a correlation of total lead concentrations and TCLP results as shown on Total Lead and TCLP Concentration Correlation, Figure 6. The results of the TCLP analysis indicated that leachable metal concentrations were less than the RCRA toxicity characteristic regulatory levels for each sample analyzed, including the two highest total lead concentrations in soil. Therefore, the soil testing using the TCLP test procedure does not qualify as a state dangerous waste using the TCLP criteria.

6.1.3. PAHs

PAH contamination greater than the MTCA Method A cleanup level was generally observed in the following locations:

- The eastern region of the North Bank (DP-1, DP-2, DP-3, DP-5 and DP-18);
- Along the Howard Street Corridor (DP-13, DP-21, DP-22, DP-23 and DP-25);
- Near the Theme Stream (DP-31, DP-32 and DP-33); and
- Throughout the Central Green (DP-26, DP-27, DP-29, DP-30 and DP-34 through -36, DP-38 and DP-40).

PAH contamination greater than the MTCA Method A cleanup level was generally widespread throughout the site and in the case of DP-35, was present at depths of at least 10 feet. Out of approximately 43 samples analyzed for PAHs, 12 exceeded the MTCA Method A cleanup level for Benzo(a)pyrene where laboratory reporting limits were less than the MTCA Method A cleanup level. Approximately 22 samples

were greater than the MTCA Method A cleanup level using the MTCA toxicity equivalent quotient (TEQ) calculation, where more than one PAH compound was detected greater than the laboratory reporting limit.

Seven samples (DP-21, DP-22, DP-23, DP-30, DP-32, DP-35 and DP-36) had calculated TEQs greater than the MTCA Method A cleanup level. Many of the PAHS analyzed for were less than laboratory reporting limits, but the laboratory reporting limits were greater than the cleanup level.

6.1.4. VOCs

Field screening of the soil samples indicated the presence of VOCs in two soil samples (DP-16 and DP-23) at depths of 2 to 3 and 1 to 2 feet respectively. These samples also had petroleum hydrocarbon concentrations greater than MTCA Method A cleanup levels. VOC analysis generally indicated the presence of benzene, toluene, ethylbenzene and xylene (BTEX) compounds in the sample from DP-23. Other VOC analytes were not detected in the sample from DP-23 greater than laboratory reporting limits. VOC analysis did not detect VOCs greater than laboratory reporting limits in DP-16. Both DP-16 and DP-23 had methylene chloride detections greater than laboratory reporting limits, however discussions with the analytical laboratory indicated that this was most likely a lab contaminant. Containers used to collect the VOC samples were stored near the organics extraction area and most likely the sample containers became contaminated with methylene chloride in the laboratory before they were used in the field.

6.1.5. PCBs

Eleven samples with ORPH greater than laboratory reporting limits were also analyzed for PCBs in accordance with Table 830-1 of the MTCA regulations. None of the samples contained detectable PCB concentrations except DP-1 from ½ to 1½ feet bgs with a concentration less than the MTCA Method A cleanup value.

6.2. Soil XRF Results

Soil collected from the direct push borings were analyzed for lead, cadmium and arsenic using a portable XRF in the field. Field XRF measurements and comparison to the laboratory analytical data are provided in Table 6.

In general, field XRF measurements generally overestimated arsenic and cadmium concentrations in the soil and there was not a strong correlation between laboratory chemical analysis and field measurements for two metals. A comparison of field XRF measurements and laboratory chemical analysis for lead generally indicated a much stronger correlation. XRF and Laboratory Chemical Analysis Correlations, Figures 7, 8 and 9 provide a summary of field XRF readings and laboratory chemical analysis results.

6.3. Quality Assurance/Quality Control Summary

GeoEngineers reviewed the laboratory internal quality assurance/quality control (QA/QC) in the context of project data quality goals. In summary, it is our opinion that the quality of the analytical data generally is acceptable for the intended use. The results of our review, as well as our evaluation of data suitability, are provided in Appendix B.

7.0 SUMMARY, INTERPRETATIONS AND RECOMMENDATIONS

The following sections present a summary of the soil conditions, our interpretations of the chemical analytical results and recommendations during the redevelopment planning of the Park.

7.1. Soil Assessment Summary

Observed subsurface conditions indicate the proposed redevelopment areas investigated generally contain fill and various amounts of debris including brick and concrete. Fill varied in thickness of the borings explored, but appears to be in excess of 10 to 15 feet in most locations where borings reached those depths.

Shallow bedrock was encountered along the North Bank redevelopment area. Excavations in these areas should anticipate should anticipate bedrock at ½ to 3 feet near the bedrock outcrop. Soil thickness generally increased to the south away from the outcrop. Groundwater was encountered in one boring at a depth of about 3 feet bgs near the bedrock outcrop.

Groundwater was encountered at about 12½ to 15 feet bgs in the Central Green. Depth to groundwater generally increased from east to west. The potential for groundwater should be considered when designing fill removal in these areas.

7.2. Interpretations and Recommendations

Laboratory analysis indicated most subsurface soil samples analyzed across the project site contained total petroleum hydrocarbons (TPH), metals and/or PAHs greater than laboratory reporting limits and/or MTCA Method A cleanup levels. Based on the known industrial history of the project site and regrading and landscaping that occurred in support of Expo '74, it is GeoEngineers' professional opinion that the subsurface conditions across the project site should be considered impacted and/or contaminated by COCs. For evaluation purposes, metals concentrations greater than twice the background concentrations (Ecology 1994) have been used to classify the soil as impacted in Figures 3 through 5. Areas near and around metals-impacted soil have the potential to exceed MTCA Method A cleanup levels.

Site soils should be handled in accordance with the site Soil Management Plan (GeoEngineers 2016b) during construction. Primary COCs include petroleum hydrocarbons, lead, cadmium and PAHs. Lead and PAHs are difficult to screen for in the field and additional laboratory chemical analysis should be conducted before earthwork occurs outside of the exploration areas. Dangerous waste was not identified in the soil samples submitted for chemical analysis.

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TABLES

GeoEngineers

Table 1

Analytical Results - CH2M Hill Test Pit Soil Samples from 2000[1]

Riverfront Park - Central Park Maintenance Property Phase II Environmental Site Assessment

Spokane, Washington

			Sample ID, Depth and Date													
			TP1-3	TP2-7	TP3-6	TP4-9	TP5-8	TP6A-8	TP7-4	TP8-4	TP8-7	TP9-4	TP10-5	TP11-10	TP12-7	TP14-10	TP14-D
			3 feet	7 feet	6 feet	9 feet	8 feet	8 feet	4 feet	4 feet	7 feet	4 feet	5 feet	10 feet	7 feet	10 feet	Duplicate
Analysis and Parameter	MTCA Method A Cleanup Level[2]	Unit	3/2/2000	3/2/2000	2/29/2000	3/1/2000	2/29/2000	3/1/2000	3/2/2000	2/29/2000	3/1/2000	2/29/2000	3/1/2000	3/1/2000	3/2/2000	3/2/2000	3/2/2000
Metals[3]																	
Lead	250	mg/kg	**45**	**3,420**	**122**	**29**	**13**	**63**	**342**	**190**	**448**	**904**	**233**	**78**	**36**	**90**	**75**
Cadmium	2	mg/kg	ND	ND	ND	ND	ND	ND	ND	**1**	**1**	**2**	ND	ND	ND	ND	ND
SVOCs[4]																	
2-Methylnaphthalene	NE	mg/kg	ND	ND	ND	ND	ND	ND	ND	**0.4**	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	NE	mg/kg	ND	ND	ND	ND	ND	ND	ND	**0.4**	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	NE	mg/kg	ND	ND	ND	ND	ND	ND	ND	**0.6**	ND	ND	ND	ND	ND	ND	ND
Pyrene	NE	mg/kg	ND	ND	ND	ND	ND	ND	ND	**0.9**	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	NE	mg/kg	ND	ND	ND	ND	ND	ND	ND	**0.4**	ND	ND	ND	ND	ND	ND	ND
Chrysene	NE	mg/kg	ND	ND	ND	ND	ND	ND	ND	**0.5**	**0.3**	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	NE	mg/kg	ND	ND	ND	ND	ND	ND	ND	**0.5**	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	NE	mg/kg	ND	ND	ND	ND	ND	ND	ND	**0.4**	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	**0.5**	**0.3**	ND	ND	ND	ND	ND	ND
VOCs[5]																	
Tetrachloroethene (PCE)	0.05	mg/kg	ND	ND	ND	**0.0061**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes

[1]Samples analyzed by Columbia Analytical Services located in Kelso, Washington.

[2]Model Toxics Control Act (MTCA) Method A cleanup levels.

[3]Metals analyzed by EPA Method 6010B

[4]SVOCs analyzed by EPA Method 8270C

[5]VOCs analyzed by EPA Method 8270B

mg/kg = milligrams per kilogram; ND = not detected;

Bold indicates that the analyte was detected above the laboratory reporting limit.

Bold and shading indicates that the analyte was detected above MTCA Method A cleanup level.

Data provided by CH2M Hill (2000)

Table 2

Soil Chemical Analytical Data - TPH, Metals[1]

Riverfront Park

Spokane, Washington

Sample Location	Sample Date	Sample Depth (feet)	TPH					Metals[3]									
			HCID Gasoline-range hydrocarbons[2] mg/kg	HCID Diesel-range hydrocarbons[2] mg/kg	Diesel-range hydrocarbons[8] mg/kg	HCID Lube Oil-range Hydrocarbons[2] mg/kg	Lube Oil-range Hydrocarbons[8] mg/kg	Arsenic mg/kg	Barium mg/kg	Cadmium[9] mg/kg	Chromium[4] mg/kg	TCLP Chromium mg/L	Lead mg/kg	TCLP Lead mg/L	Mercury[5] µg/kg	Selenium mg/kg	Silver mg/kg
DP-1	9/20/2016	0.5-1.5	43 U	**2,800**	**1,000 J**	**4,400**	**1,800 J**	**3.2 J**	**190 J**	**1.7 J**	**3.9**	--	**210 J**	--	**73**	16 U	**0.48 J**
DP-1	9/20/2016	3-4	41 U	**7,400**	**3,000 J**	**9,900**	**4,200 J**	6.7 U	**42 J**	0.19 U	**2.3 J**	--	**12 J**	--	48 U	16 U	3.3 UJ
DP-2	9/20/2016	0.5-1.5	50 U	130 U	--	**490**	--	8.0 U	**370**	**2.7 J**	**4.1**	--	**140**	0.15 U	**170**	19 U	**0.36 J**
DP-3	9/20/2016	0.5-1.5	40 U	100 U	--	**380**	--	**8.7**	**120**	**2.4 J**	**35**	--	**390**	**0.26**	**720**	15 U	**1.6 J**
DP-4	9/20/2016	1-2	40 U	99 U	--	99 U	--	**7.9**	**50**	**0.24 J**	**8.6**	--	**51**	--	**110**	15 U	**0.43 J**
DP-5	9/20/2016	0.5-1.5	42 U	**190**	--	**480**	--	**5.1 J**	**180**	**1.5 J**	**5.9**	--	**210**	--	**280**	16 U	**0.73 J**
DP-6	9/20/2016	1-2	44 U	110 U	--	**170**	--	**6.3 J**	**370**	**2.2 J**	**5.3**	--	**420**	--	**120**	16 U	**0.99 J**
DP-7	9/20/2016	1.5-2.5	40 U	99 U	--	99 U	--	6.6 U	**49**	0.19 U	**1.2 J**	--	**15**	--	**400**	16 U	3.3 U
DP-8	9/20/2016	0.5-1.5	40 U	100 U	--	**430**	--	**7.1**	**66**	**0.24 J**	**6.8**	--	**62**	--	48 U	16 U	**0.29 J**
DP-9	9/20/2016	0-1	42 U	110 U	--	110 U	--	**5.0 J**	**100**	0.19 U	**9.9**	--	**8.8**	--	**160**	16 U	3.4 U
DP-10	9/20/2016	1.5-2.5	42 U	100 U	--	100 U	--	**3.7 J**	**160**	**0.42 J**	**11**	--	**27**	--	**49**	16 U	3.4 U
DP-11	9/20/2016	1-2	39 U	96 U	--	96 U	--	**2.5 J**	**110**	0.18 U	**1.7 J**	--	4.4 U	--	45 U	16 U	3.3 U
DP-12	9/20/2016	1-2	41 U	100 U	--	**110**	--	**7.6**	**120**	**0.64 J**	**9.3**	--	**130**	--	**65**	16 U	**0.29 J**
DP-13	9/20/2016	0-1	38 U	**100**	**70 J**	**1,500**	**700 J**	6.3 U	**97**	0.18 U	**6.0**	--	**18**	--	42 U	15 U	3.2 U
DP-14	9/20/2016	1-2	47 U	120 U	--	120 U	--	**5.4 J**	**260**	**0.32 J**	**11**	--	**40**	--	**63**	18 U	**0.56 J**
DP-15	9/20/2016	0.5-1.5	46 U	**120**	--	**280**	--	**9.1**	**310**	**1.5 J**	**6.3**	--	**540**	0.030 U	**86**	18 U	**3.5 J**
DP-16	9/20/2016	2-3	42 U	**7,100**	**7,400 J**	**11,000**	**9,700 J**	6.6 U	**91**	**0.25 J**	**2.4 J**	--	**47**	--	**600**	16 U	3.3 U
DP-17	9/21/2016	1-2	39 U	98 U	--	98 U	--	**8.3**	**110**	**2.4 J**	**7.5**	--	**1300**	**0.36**	**160**	16 U	**2.9 J**
DP-18	9/21/2016	1.5-2.5	41 U	100 U	--	100 U	--	**14**	**73 J**	0.18 U	**9.2**	--	**36 J**	--	**79**	15 U	3.2 U
DP-19	9/21/2016	1.5-2.5	80 U	200 U	510 UJ	**2,800**	**2,200 J**	**5.3 J**	**64**	0.19 U	**4.3**	--	**7.5**	--	49 U	16 U	3.3 U
DP-20	9/21/2016	1-2	78 U	**440**	500 UJ	**5,100**	**5,200 J**	**4.3 J**	**40**	0.17 U	**8.6**	--	**17**	--	46 U	15 U	3.1 U
DP-21	9/21/2016	1-2	76 U	**310**	500 UJ	**4,200**	**3,700 J**	**5.5 J**	**61**	0.18 U	**9.1**	--	**4.9 J**	--	49 U	15 U	3.2 U
DP-22	9/21/2016	2-3	78 U	**290**	510 UJ	**3,500**	**4,900 J**	**5.1 J**	**43**	**0.73 J**	**9.8**	--	**160**	--	48 U	15 U	3.2 U
DP-23	9/21/2016	1-2	75 U	**870 J**	**990 J**	**6,700 J**	**10,000 J**	**3.2 J**	**23**	0.18 U	**1.9 J**	--	**2.1 J**	--	50 U	15 U	0.28 U
DP-24	9/21/2016	1-2	39 U	98 U	--	**330**	--	**6.9**	**89**	**0.22 J**	**9.6**	--	**68**	--	47 U	15 U	3.1 U
DP-25	9/21/2016	1-2	41 U	100 U	--	100 U	--	**16**	**140**	**1.4 J**	**13**	--	**950**	**0.41**	**760**	15 U	**1.1 J**
DP-26	9/21/2016	1.5-2.5	38 U	96 U	--	**640**	--	**10**	**87**	**0.19 J**	**210**	0.0047 J	**130**	--	**85**	15 U	3.2 U
DP-27	9/21/2016	1.5-2.5	40 U	**120**	--	**270**	--	**10**	**64**	**0.18 J**	**16**	--	**70**	--	47 U	15 U	3.1 U
DP-28	9/21/2016	1-2	39 U	98 U	--	98 U	--	**3.1 J**	**410**	**0.29 J**	**7.1**	--	**53**	--	49 U	16 U	3.4 U
DP-29	9/21/2016	1.5-2.5	42 U	100 U	--	**180**	--	**11**	**64**	**0.20 J**	**11**	--	**66**	--	**130 J**	16 U	3.4 U
DP-29	9/21/2016	10-11	41 U	100 U	--	100 U	--	**13**	**59**	0.18 U	**11**	--	**12**	--	49 U	16 U	3.3 U
DP-30	9/21/2016	1.5-2.5	78 U	200 U	--	**820**	--	**10**	**59**	0.18 U	**10**	--	**17**	--	**110**	16 U	3.2 U

Sample Location	Sample Date	Sample Depth (feet)	TPH					Metals[3]									
			HCID Gasoline-range hydrocarbons[2] mg/kg	HCID Diesel-range hydrocarbons[2] mg/kg	Diesel-range hydrocarbons[8] mg/kg	HCID Lube Oil-range Hydrocarbons[2] mg/kg	Lube Oil-range Hydrocarbons[8] mg/kg	Arsenic mg/kg	Barium mg/kg	Cadmium[9] mg/kg	Chromium[4] mg/kg	TCLP Chromium mg/L	Lead mg/kg	TCLP Lead mg/L	Mercury[5] µg/kg	Selenium mg/kg	Silver mg/kg
DP-31	9/22/2016	2-3	41 U	100 U	--	**120**	--	**7.3**	**110**	**0.24 J**	**11**	--	**64**	--	**250**	16 U	0.32 U
DP-32	9/22/2016	1.5-2.5	41 U	100 U	--	**340**	--	**8.7**	**96**	**1.1 J**	**11**	--	**300**	--	**100**	16 U	0.45 U
DP-33	9/22/2016	1-2	40 U	100 U	--	**150**	--	**7.3**	**170**	**0.71 J**	**16**	--	**210**	**0.28**	**190**	15 U	3.2 U
DP-34	9/22/2016	1.5-2.5	41 U	100 U	--	**470**	--	**9.9**	**88**	**0.48 J**	**11**	--	**180**	--	**130**	16 U	3.3 U
DP-35	9/22/2016	1.5-2.5	41 U	**160**	510 U	**2,600**	**2,500**	**7.9**	**53**	0.19 U	**5.9**	--	**12**	--	47 U	16 U	**0.24 J**
DP-35	9/22/2016	10-11	42 U	100 U	--	100 U	--	**6.7 J**	**140**	0.19 U	**7.2**	--	**30**	--	**170**	17 U	2.3 U
DP-36	9/22/2016	2-3	39 U	**150**	490 U	**1,900**	**3,000**	**7.1**	**50**	0.18 U	**6.2**	--	**46**	--	44 U	16 U	2.2 U
DP-37	9/22/2016	10-11	42 U	110 U	--	110 U	--	**7.5**	**93**	0.18 U	**9.6**	--	**24**	--	46 U	16 U	2.3 U
DP-38	9/22/2016	2-3	43 U	110 U	--	**240**	--	**18**	**73**	**15**	**9.2**	--	**1800**	**1.1**	**190**	16 U	**3.2**
DP-38	9/22/2016	6-7	41 U	**150**	--	**270**	--	**5.1 J**	**100**	**0.34 J**	**8.2**	--	**58**	--	**96**	16 U	2.5 U
DP-39	9/22/2016	2-3	55 U	140 U	--	**160**	--	**16**	**63**	0.24 U	**9.0**	--	10 U	--	49 U	21 U	3.0 U
DP-40	9/22/2016	10.5-11.5	41 U	100 U	--	100 U	--	**6.4 J**	**75**	0.18 U	**7.5**	--	**56**	--	**120**	16 U	2.5 U
MTCA Method A Cleanup Level[6]			100	2,000	2,000	2,000	2,000	20	NE	2	2,000	5[10]	250	5[10]	2,000	NE	NE
Spokane Basin Background Metal Concentration[7]			NE	NE	NE	NE	NE	9.34	NE	0.7	17.8	NE	14.9	NE	20	NE	NE

Notes

[1]Samples analyzed by TestAmerica Laboratories, Inc. located in Spokane Valley, Washington.

[2]Total Petroleum Hydrocarbons (TPH) analyzed using Method Northwest Method TPH-HCID.

[3]Metals analyzed using Environmental Protection Agency (EPA) Method 6010C.

[4]Chromium III cleanup level is 2,000 mg/kg. MTCA Method A cleanup level for Chromium VI is 19 mg/kg.

[5]Mercury analyzed using EPA Method 7471B.

[6]Model Toxics Control Act (MTCA) Method A unrestricted land use cleanup levels (CUL).

[7]Background level used for metals in soil is the Washington State Department of Ecology (Ecology) Natural Background 90th percentile value for the Spokane basin (Ecology 1994).

[8]Diesel and oil-range hydrocarbons analyzed using Method NWTPH-Dx.

[9]Non-detected sample results reported down to the method detection limit (MDL).

[10]RCRA maximum toxicity characteristic concentration

mg/kg = milligrams per kilogram; mg/L = milligrams per liter; NE = not established; µg/kg = micrograms per kilogram;

J = estimated result; U = analyte was not detected above the reporting limit.

Bold indicates analyte was detected.

Bold and gray shading indicates the analyte was detected above MTCA Method A CUL.

Table 3

Soil Chemical Analytical Data - PAHs[1,2]

Riverfront Park

Spokane, Washington

Sample Location	Sample Interval (feet)	1-Methylnaphthalene µg/kg	2-Methylnaphthalene µg/kg	Naphthalene µg/kg	Acenaphthene µg/kg	Acenaphthylene µg/kg	Anthracene µg/kg	Benzo(a)anthracene µg/kg	Benzo(a)pyrene µg/kg	Benzo(b)fluoranthene µg/kg	Benzo(g,h,i)perylene µg/kg	Benzo(k)fluoranthene µg/kg	Chrysene µg/kg	Dibenzo(a,h)anthracene µg/kg	Fluoranthene µg/kg	Fluorene µg/kg	Indeno(1,2,3-c,d)pyrene µg/kg	Phenanthrene µg/kg	Pyrene µg/kg	Total cPAHs[3] TEQ (ND=0.5RL)[4] µg/kg
DP-1	0.5-1.5	**330**	**350**	**140**	27 U	27 U	**30**	**82**	**84 J**	**130**	**70**	**36**	**140**	27 U	**140 J**	**39**	**56**	**280 J**	**180 J**	**117**
DP-1	3-4	11 U	11 U	11 U	11 U	11 U	**20**	53 U	53 U	53 U	53 U	53 U	53 U	53 U	**18**	**23**	53 U	**31**	**74**	40 U
DP-2	0.5-1.5	**250**	**330**	**200**	32 U	**120**	**170**	**140**	**130**	**380**	**260**	**74**	**210**	**51**	**270**	32 U	**140**	**480**	**240**	**211**
DP-3	0.5-1.5	**47**	**50**	**43**	**50**	**51**	**190**	**650**	**760**	**1,000**	**370**	**380**	**760**	**100**	**1,000**	39 U	**330**	**480**	**1,100**	**1,014**
DP-4	1-2	10 U	10 U	10 U	10 U	10 U	10 U	**23**	**25**	**32**	**13**	**12**	**25**	10 U	**46**	10 U	**12**	**36**	**54**	**34**
DP-5	0.5-1.5	**100**	**130**	**56**	**12**	**12**	**29**	**71**	**76**	**130**	**47**	**31**	**110**	**13**	**150**	**11**	**46**	**180**	**140**	**106**
DP-6	1-2	**110**	**160**	**180**	11 U	**22**	**37**	**58**	**66**	**130**	**62**	**35**	**96**	**20**	**110**	11 U	**46**	**160**	**110**	**96**
DP-7	1.5-2.5	10 U	10 U	10 U	10 U	10 U	10 U	**12**	**16**	**21**	10 U	10 U	**16**	10 U	**18**	10 U	10 U	10 U	**25**	**21**
DP-8	0.5-1.5	**34**	**41**	**26**	26 U	26 U	26 U	**28**	**34**	**65**	**26**	26 U	**47**	26 U	**48**	26 U	26 U	**47**	**50**	**48**
DP-9	0-1	**26**	**33**	**21**	11 U	**21**	**19**	**34**	**39**	**34**	**120**	**19**	**170**	**18**	**23**	11 U	**65**	**20**	**28**	**58**
DP-10	1.5-2.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U	**11**	**14**	**11**	11 U	11 U	11 U	**16**	11 U	11 U	**12**	**17**	**15**
DP-11	1-2	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	8 U
DP-12	1-2	**26**	**29**	**17**	10 U	10 U	**11**	**29**	**28**	**38**	**29**	**15**	**35**	10 U	**47**	10 U	**22**	**51**	**51**	**39**
DP-13	0-1	70 U	70 U	70 U	70 U	70 U	70 U	70 U	**82**	**99**	70 U	70 U	**110**	70 U	**120**	70 U	70 U	**120**	**130**	**106**
DP-14	1-2	**240**	**320**	**190**	70 U	70 U	70 U	70 U	70 U	70 U	70 U	70 U	70 U	70 U	70 U	70 U	70 U	**120**	**80**	53 U
DP-15	0.5-1.5	**280**	**340**	**150**	**14**	**56**	**55**	**57**	**56**	**110**	**95**	**30**	**110**	**22**	**78**	**18**	**62**	**280**	**93**	**85**
DP-16	2-3	**85**	**92**	**30**	**130**	**17**	**240**	**120**	53 U	53 U	**63**	53 U	**230**	53 U	**150**	**190**	53 U	**130**	**610**	**51**
DP-17	1-2	**10**	**14**	10 U	10 U	10 U	10 U	**21**	**27**	**44**	**19**	**14**	**27**	10 U	**38**	10 U	**17**	**25**	**41**	**37**
DP-18	1.5-2.5	10 U	10 U	10 U	10 U	10 U	**11**	**64**	**85**	**110**	**37**	**110**	**75**	**14**	**78**	10 U	**37**	**25**	**120**	**119**
DP-19	1.5-2.5	62 U	62 U	62 U	62 U	62 U	62 U	62 U	62 U	**99**	**67**	62 U	**160**	62 U	62 U	62 U	62 U	62 U	62 U	**55**
DP-20	1-2	58 U	580 U	58 U	58 U	58 U	**120**	58 U	58 U	**130**	**78**	58 U	**200**	58 U	58 U	58 U	58 U	**120**	**73**	**56**
DP-21	1-2	61 U	61 U	61 U	61 U	61 U	61 U	**190**	1,200 U	1,200 U	1,200 U	1,200 U	61 U	1,200 U	61 U	61 U	1,200 U	61 U	**110**	**859**
DP-22	2-3	120 U	120 U	120 U	120 U	120 U	120 U	**440**	1,200 U	**1,200**	1,200 U	1,200 U	**560**	1,200 U	**750**	120 U	1,200 U	**300**	**1,400**	**950**
DP-23	1-2	120 U	120 U	120 U	120 U	120 U	120 U	120 U	1,200 U	1,200 U	1,200 U	1,200 U	**440**	1,200 U	**140**	120 U	1,200 U	**260**	**270**	**850**
DP-24	1-2	26 U	26 U	26 U	26 U	26 U	26 U	26 U	**38**	**52**	26 U	26 U	**50**	26 U	**41**	26 U	26 U	**30**	**54**	**49**
DP-25	1-2	**12**	**14**	10 U	10 U	**16**	**36**	**130**	**150**	**230**	**54**	**78**	**150**	**20**	**220**	**11**	**53**	**110**	**250**	**203**
DP-26	1.5-2.5	260 U	260 U	260 U	130 U	130 U	130 U	**340**	**390**	**510**	**270**	130 U	**360**	130 U	**590**	130 U	**240**	**410**	**720**	**516**
DP-27	1.5-2.5	26 U	**29**	**67**	**89**	**1,200**	**360**	**3,400**	**3,500**	**4,000**	**1,100**	**1,900**	**3,600**	**330**	**4,900**	**90**	**1,100**	**680**	**6,700**	**4,609**
DP-28	1-2	10 U	10 U	10 U	10 U	**10**	10 U	**30**	**36**	**40**	**28**	**15**	**32**	10 U	**45**	10 U	**25**	**19**	**59**	**48**
DP-29	1.5-2.5	21 U	21 U	21 U	21 U	**23**	**42**	**150**	**160**	**200**	**79**	**78**	**170**	**27**	**260**	21 U	**65**	**130**	**300**	**214**
DP-29	10-11	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	8 U
DP-30	1.5-2.5	51 U	51 U	51 U	51 U	51 U	51 U	51 U	260 U	260 U	260 U	260 U	**60**	260 U	**53**	51 U	260 U	51 U	**94**	**185**

Sample Location	Sample Interval (feet)	1-Methylnaphthalene µg/kg	2-Methylnaphthalene µg/kg	Naphthalene µg/kg	Acenaphthene µg/kg	Acenaphthylene µg/kg	Anthracene µg/kg	Benzo(a)anthracene µg/kg	Benzo(a)pyrene µg/kg	Benzo(b)fluoranthene µg/kg	Benzo(g,h,i)perylene µg/kg	Benzo(k)fluoranthene µg/kg	Chrysene µg/kg	Dibenzo(a,h)anthracene µg/kg	Fluoranthene µg/kg	Fluorene µg/kg	Indeno(1,2,3-c,d)pyrene µg/kg	Phenanthrene µg/kg	Pyrene µg/kg	Total cPAHs[3] TEQ (ND=0.5RL)[4] µg/kg
DP-31	2-3	11 U	**11**	11 U	**14**	**21**	**51**	**160**	**190**	**290**	**90**	**95**	**180**	**30**	**310**	**13**	**93**	**180**	**320**	**259**
DP-32	1.5-2.5	39 U	39 U	39 U	39 U	39 U	39 U	**65**	780 U	780 U	780 U	780 U	**71**	780 U	**110**	39 U	780 U	**95**	**190**	**553**
DP-33	1-2	10 U	**11**	10 U	10 U	**14**	**23**	**95**	**99**	**140**	**46**	**54**	**100**	**16**	**170**	10 U	**46**	**73**	**170**	**135**
DP-34	1.5-2.5	26 U	26 U	26 U	**42**	**45**	**150**	**510**	**500**	**590**	**180**	**270**	**550**	**68**	**940**	**40**	**200**	**580**	**980**	**669**
DP-35	1.5-2.5	63 U	63 U	63 U	63 U	63 U	63 U	63 U	1300 U	1300 U	1300 U	1300 U	**71**	1300 U	63 U	63 U	1300 U	63 U	63 U	**914**
DP-35	10-11	11 U	11 U	**16**	**12**	**33**	**61**	**260**	**260**	**340**	**96**	**170**	**290**	**34**	**600**	**30**	**97**	**310**	**580**	**353**
DP-36	2-3	63 U	63 U	63 U	63 U	63 U	63 U	63 U	630 U	630 U	630 U	630 U	**95**	630 U	63 U	63 U	630 U	63 U	**70**	**445**
DP-37	10-11	11 U	11 U	11 U	11 U	11 U	11 U	**39**	**53**	**63**	**24**	**25**	**39**	11 U	**72**	11 U	**24**	**40**	**71**	**69**
DP-38	2-3	**28**	**50**	**33**	27 U	**27**	**52**	**96**	**110**	**180**	**80**	**58**	**130**	27 U	**210**	27 U	**68**	**130**	**250**	**153**
DP-38	6-7	**38**	**52**	**39**	**160**	**54**	**370**	**400**	**360**	**450**	**150**	**140**	**610**	**42**	**630**	**360**	**120**	**260**	**1100**	**481**
DP-39	2-3	35 U	35 U	35 U	35 U	35 U	35 U	35 U	180 U	180 U	180 U	180 U	35 U	180 U	35 U	35 U	180 U	35 U	35 U	128 U
DP-40	10.5-11.5	10 U	**12**	**26**	10 U	**67**	**57**	**280**	**660**	**720**	**340**	**300**	**360**	**100**	**200**	10 U	**290**	**58**	**340**	**833**
MTCA Method A Cleanup Level[5]		5,000[6]			NE	NE	NE	NE	100	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	100

Notes

[1]Samples analyzed by TestAmerica Laboratories, Inc. located in Spokane Valley, Washington.

[2]Polycyclic aromatic hydrocarbons analyzed using EPA Method 8270D.

[3]Carcinogenic PAH (cPAH) toxic equivalency (TEQ) calculated using toxicity equivalency factors (TEF) from MTCA Table 708-2, based on methodology described in MTCA Cleanup Regulation Washington Administrative Code (WAC) 173-340-708.

[4]The TEQ reported was calculated using half the laboratory reporting limits for cPAHs less than reporting limits.

[5]Model Toxics Control Act (MTCA) Method A unrestricted land use cleanup levels (CUL).

[6]Sum total value for naphthalene, 1-methyl naphthalene and 2-methyl naphthalene.

mg/kg = milligrams per kilogram; mg/L = milligrams per liter; NE = not established; µg/kg = micrograms per kilogram;

J = estimated result; U = analyte was not detected above the reporting limit.

Bold indicates analyte was detected.

Bold and gray shading indicates the analyte was detected above MTCA Method A CUL.

Blue shading indicates the analyte was not detected above the reporting limit, but the concentration was greater than or equal to the MTCA Method A CUL.

Table 4

Soil Chemical Analytical Data - VOCs[1]

Riverfront Park

Spokane, Washington

Analyte[3]	MTCA Method A Cleanup Level[2]	Unit	Sample Name, Date and Depth Interval	
			DP-16 9/20/2016 2-3 ft	DP-23 9/21/2016 1-2 ft
1,1,1,2-Tetrachloroethane	NE	µg/kg	130 UJ	66 UJ
1,1,1-Trichloroethane	NE	µg/kg	130 UJ	66 UJ
1,1,2,2-Tetrachloroethane	NE	µg/kg	32 UJ	17 UJ
1,1,2-Trichloroethane	NE	µg/kg	39 UJ	20 UJ
1,1-Dichloroethane	NE	µg/kg	130 UJ	66 UJ
1,1-Dichloroethene	NE	µg/kg	65 UJ	33 UJ
1,1-Dichloropropene	NE	µg/kg	130 UJ	66 UJ
1,2,3-Trichlorobenzene	NE	µg/kg	130 UJ	66 UJ
1,2,3-Trichloropropane	NE	µg/kg	130 UJ	66 UJ
1,2,4-Trichlorobenzene	NE	µg/kg	130 UJ	66 UJ
1,2,4-Trimethylbenzene	NE	µg/kg	130 UJ	66 UJ
1,2-Dibromo-3-Chloropropane	NE	µg/kg	650 UJ	330 UJ
1,2-Dibromoethane	NE	µg/kg	52 UJ	26 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	NE	µg/kg	130 UJ	66 UJ
1,2-Dichloroethane	NE	µg/kg	52 UJ	26 UJ
1,2-Dichloropropane	NE	µg/kg	52 UJ	26 UJ
1,3,5-Trimethylbenzene	NE	µg/kg	130 UJ	66 UJ
1,3-Dichlorobenzene (m-Dichlorobenzene)	NE	µg/kg	190 UJ	99 UJ
1,3-Dichloropropane	NE	µg/kg	130 UJ	66 UJ
1,4-Dichlorobenzene (p-Dichlorobenzene)	NE	µg/kg	190 UJ	99 UJ
2,2-Dichloropropane	NE	µg/kg	130 UJ	66 UJ
2-Chlorotoluene	NE	µg/kg	130 UJ	66 UJ
4-Chlorotoluene	NE	µg/kg	130 UJ	66 UJ
Benzene	30	µg/kg	52 UJ	**26 J**
Bromobenzene	NE	µg/kg	130 UJ	66 UJ
Bromochloromethane	NE	µg/kg	130 UJ	66 UJ
Bromodichloromethane	NE	µg/kg	130 UJ	66 UJ
Bromoform (Tribromomethane)	NE	µg/kg	320 UJ	170 UJ
Bromomethane	NE	µg/kg	450 UJ	230 UJ
Carbon Tetrachloride	NE	µg/kg	65 UJ	33 UJ
Chlorobenzene	NE	µg/kg	130 UJ	66 UJ
Chloroethane	NE	µg/kg	1300 UJ	660 UJ
Chloroform	NE	µg/kg	130 UJ	66 UJ
Chloromethane	NE	µg/kg	320 UJ	170 UJ
cis-1,2-Dichloroethene	NE	µg/kg	130 UJ	66 UJ
cis-1,3-Dichloropropene	NE	µg/kg	52 UJ	26 UJ
Dibromochloromethane	NE	µg/kg	65 UJ	33 UJ
Dibromomethane	NE	µg/kg	190 UJ	99 UJ
Dichlorodifluoromethane (CFC-12)	NE	µg/kg	650 UJ	330 UJ
Ethylbenzene	6,000	µg/kg	130 UJ	**110 J**
Hexachlorobutadiene	NE	µg/kg	260 UJ	130 UJ
Isopropylbenzene (Cumene)	NE	µg/kg	130 UJ	66 UJ
Methyl t-butyl ether (MTBE)	100	µg/kg	130 UJ	66 UJ
Naphthalene	5,000	µg/kg	130 UJ	66 UJ

Analyte[3]	MTCA Method A Cleanup Level[2]	Unit	Sample Name, Date and Depth Interval	
			DP-16 9/20/2016 2-3 ft	DP-23 9/21/2016 1-2 ft
n-Butylbenzene	NE	µg/kg	130 UJ	66 UJ
n-Propylbenzene	NE	µg/kg	130 UJ	66 UJ
p-Isopropyltoluene	NE	µg/kg	130 UJ	66 UJ
Sec-Butylbenzene	NE	µg/kg	130 UJ	66 UJ
Styrene	NE	µg/kg	130 UJ	66 UJ
Tert-Butylbenzene	NE	µg/kg	130 UJ	66 UJ
Tetrachloroethene	50	µg/kg	65 UJ	33 UJ
Toluene	7,000	µg/kg	130 UJ	**490 J**
Trans-1,2-Dichloroethene	NE	µg/kg	130 UJ	66 UJ
Trans-1,3-Dichloropropene	NE	µg/kg	130 UJ	66 UJ
Trichloroethene	30	µg/kg	78 UJ	40 UJ
Trichlorofluoromethane (CFC-11)	NE	µg/kg	650 UJ	330 UJ
Vinyl Chloride	NE	µg/kg	52 UJ	26 UJ
Xylene, m-,p-	9,000[4]	µg/kg	650 UJ	**430 J**
Xylene, o-		µg/kg	130 UJ	**120 J**
Methylene Chloride	20	µg/kg	**3200 J**	**840 J**

Notes

[1]Samples analyzed by TestAmerica Laboratories, Inc. located in Spokane Valley, Washington.

[2]Model Toxics Control Act (MTCA) Method A unrestricted land use cleanup levels (CUL).

[3]Volatile organic compounds analyzed by EPA Method 8260C.

[4]This is a total value for all xylenes.

µg/kg = micrograms per kilogram; U = analyte was not detected above the laboratory reporting limit;

J = results are estimated; NE = Not Established.

Bold indicates that the analyte was detected above the laboratory reporting limit.

Bold and gray shading indicates the analyte was detected about the MTCA Method A CUL.

Table 5

Soil Chemical Analytical Data - PCBs[1]

Riverfront Park

Spokane, Washington

Analyte[3]	MTCA Method A Cleanup Level[2]	Unit	Sample Name, Date and Depth Interval										
			DP-1 9/20/2016 0.5-1.5 ft	DP-1 9/20/2016 3-4 ft	DP-13 9/20/2016 0-1 ft	DP-16 9/20/2016 2-3 ft	DP-19 9/21/2016 1.5-2.5 ft	DP-20 9/21/2016 1-2 ft	DP-21 9/21/2016 1-2 ft	DP-22 9/21/2016 2-3 ft	DP-23 9/21/2016 1-2 ft	DP-35 9/22/2016 1.5-2.5 ft	DP-36 9/22/2016 2-3 ft
PCB-Aroclor 1016	1,000	µg/kg	11 U	10 U	20 UJ	11 U	52 U	50 U	51 U	51 U	49 U	53 U	53 U
PCB-Aroclor 1221		µg/kg	11 U	10 U	20 UJ	11 U	52 U	50 U	51 U	51 U	49 U	53 U	53 U
PCB-Aroclor 1232		µg/kg	11 U	10 U	20 UJ	11 U	52 U	50 U	51 U	51 U	49 U	53 U	53 U
PCB-Aroclor 1242		µg/kg	11 U	10 U	20 UJ	11 U	52 U	50 U	51 U	51 U	49 U	53 U	53 U
PCB-Aroclor 1248		µg/kg	11 U	10 U	20 UJ	11 U	52 U	50 U	51 U	51 U	49 U	53 U	53 U
PCB-Aroclor 1254		µg/kg	**23**	10 U	20 UJ	11 U	52 U	50 U	51 U	51 U	49 U	53 U	53 U
PCB-Aroclor 1260		µg/kg	11 U	10 U	20 UJ	11 U	52 U	50 U	51 U	51 U	49 U	53 U	53 U
PCB-Aroclor 1262		µg/kg	11 U	10 U	20 UJ	11 U	52 U	50 U	51 U	51 U	49 U	53 U	53 U
PCB-Aroclor 1268		µg/kg	11 U	10 U	20 UJ	11 U	52 U	50 U	51 U	51 U	49 U	53 U	53 U
Total PCBs[4]		µg/kg	**23**	10 U	20 UJ	11 U	52 U	50 U	51 U	51 U	49 U	53 U	53 U

Notes

[1]Samples analyzed by TestAmerica Laboratories, Inc. located in Spokane Valley, Washington.

[2]Model Toxics Control Act (MTCA) Method A unrestricted land use cleanup levels (CUL).

[3]Polychlorinated biphenyls (PCBs) analyzed by EPA Method 8082A.

[4]Total PCBs is the sum of all PCBs.

µg/kg = micrograms per kilogram; U = analyte was not detected above the laboratory reporting limit; J = results are estimated.

Bold indicates that the analyte was detected above the laboratory reporting limit.

Bold and gray shading indicates the analyte was detected about the MTCA Method A CUL.

Table 6

Soil XRF and Laboratory Metals Results

Riverfront Park

Spokane, Washington

Sample Location	Depth (feet)	Arsenic (mg/kg)		Cadmium (mg/kg)		Lead (mg/kg)	
		XRF[1]	Laboratory[2]	XRF[1]	Laboratory[2]	XRF[1]	Laboratory[2]
DP-1	1	<LOD	**3.2 J**	**63**	**1.7 J**	**229**	**210 J**
DP-1	2	<LOD	--	**50**	--	<LOD	--
DP-2	½ - 1½	<LOD	8.0 U	<LOD	**2.7 J**	**332**	**140**
DP-3	½ - 1½	<LOD	**8.7**	**38**	**2.4 J**	**498**	**390**
DP-4	1 - 2	<LOD	**7.9**	**34**	**0.24 J**	**43**	**51**
	5	<LOD	--	**61**	--	**1,812**	--
	6	<LOD	--	**69**	--	**61**	--
	10	<LOD	--	**40**	--	<LOD	--
DP-5	½ - 1½	<LOD	**5.1 J**	<LOD	**1.5 J**	**219**	**210**
DP-6	1 - 2	<LOD	**6.3 J**	<LOD	**2.2 J**	**35**	**420**
DP-7	½	<LOD	--	**32**	--	**189**	--
	2	<LOD	6.6 U	**52**	0.19 U	<LOD	**15**
DP-8	1	<LOD	**7.1**	**36**	**0.24 J**	**318**	**62**
	2	<LOD	--	**31**	--	<LOD	--
DP-9	1	**32**	**5.0 J**	**29**	0.19 U	**130**	**8.8**
DP-10	1	<LOD	**3.7 J**	**28**	**0.42 J**	**22**	**27**
	2	<LOD	--	**67**	--	<LOD	--
DP-11	1	<LOD	**2.5 J**	<LOD	0.18 U	<LOD	4.4 U
	2	<LOD	--	<LOD	--	<LOD	--
	5	<LOD	--	**53**	--	<LOD	--
DP-12	1	<LOD	**7.6**	**62**	**0.64 J**	<LOD	**130**
DP-13	½	<LOD	6.3 U	<LOD	0.18 U	<LOD	**18**
DP-14	1	<LOD	**5.4 J**	<LOD	**0.32 J**	**39**	**40**
	5	<LOD	--	**64**	--	<LOD	--
	10	<LOD	--	<LOD	--	**19**	--
DP-15	1	<LOD	**9.1**	<LOD	**1.5 J**	**339**	**540**
	5	<LOD	--	<LOD	--	<LOD	--
DP-16	1	<LOD	--	<LOD	--	<LOD	--
	2½	<LOD	6.6 U	**66**	**0.25 J**	<LOD	**47**
DP-17	1	<LOD	**8.3**	**39**	**2.4 J**	**320**	**1,300**
	5	<LOD	--	**59**	--	**62**	--
DP-18	1	<LOD	**14**	**32**	0.18 U	**155**	**36 J**
	5	<LOD	--	**40**	--	<LOD	--
	10	<LOD	--	**60**	--	<LOD	--
DP-19	1	<LOD	**5.3 J**	**54**	0.19 U	<LOD	**7.5**
	5	<LOD	--	**45**	--	**42**	--
DP-20	1	<LOD	**4.3 J**	<LOD	0.17 U	<LOD	**17**
	2	<LOD	--	<LOD	--	<LOD	--
DP-21	1	**21**	**5.5 J**	**35**	0.18 U	<LOD	**4.9 J**
	2	**22**	--	**48**	--	**38**	--

Sample Location	Depth (feet)	Arsenic (mg/kg)		Cadmium (mg/kg)		Lead (mg/kg)	
		XRF[1]	Laboratory[2]	XRF[1]	Laboratory[2]	XRF[1]	Laboratory[2]
DP-22	1	<LOD	**5.1 J**	**37**	**0.73 J**	**508**	**160**
DP-23	1	<LOD	**3.2 J**	<LOD	0.18 U	<LOD	**2.1 J**
	5	<LOD	--	**27**	--	**32**	--
	10	<LOD	--	<LOD	--	**81**	--
DP-24	1	<LOD	**6.9**	<LOD	**0.22 J**	**68**	**68**
	10	<LOD	--	**27**	--	**27**	--
DP-25	1	<LOD	**16**	<LOD	**1.4 J**	**742**	**950**
	5	<LOD	--	<LOD	--	**113**	--
	10	<LOD	--	<LOD	--	**148**	--
DP-26	1½	**22**	**10**	<LOD	**0.19 J**	**274**	**130**
	2	<LOD	--	**26**	--	**619**	--
DP-27	1½	**13**	**10**	<LOD	**0.18 J**	**57**	**70**
	5	<LOD	--	**26**	--	**77**	--
	10	<LOD	--	<LOD	--	**74**	--
DP-28	1	<LOD	**3.1 J**	<LOD	**0.29 J**	**199**	**53**
	5	**31**	--	**25**	--	**158**	--
	10	<LOD	--	<LOD	--	**130**	--
DP-29	1½	<LOD	**11**	**35**	**0.20 J**	**76**	**66**
	3	<LOD	--	<LOD	--	<LOD	--
	5	**13**	--	<LOD	--	<LOD	--
	7½	<LOD	--	**36**	--	<LOD	--
	10	**14**	**13**	<LOD	0.18 U	<LOD	**12**
DP-30	1½	**33**	**10**	**58**	0.18 U	<LOD	**17**
	5	<LOD	--	**49**	--	<LOD	--
	10	**27**	--	<LOD	--	<LOD	--
DP-31	1	**14**	--	**36**	--	<LOD	--
	2	<LOD	**7.3**	<LOD	**0.24 J**	**100**	**64**
	4	<LOD	--	<LOD	--	**132**	--
	7½	**22**	--	<LOD	--	**74**	--
DP-32	1½	<LOD	--	<LOD	--	**55**	--
	2	<LOD	**8.7**	<LOD	**1.1 J**	**397**	**300**
	5½	**12**	--	**24**	--	<LOD	--
	7	<LOD	--	<LOD	--	**23**	--
	10	<LOD	--	<LOD	--	**232**	--
DP-33	1	<LOD	**7.3**	**13**	**0.71 J**	**242**	**210**
	2	<LOD	--	<LOD	--	**34**	--
	5½	**27**	--	**24**	--	**101**	--
	10½	<LOD	--	<LOD	--	<LOD	--
DP-34	1	**20**	--	<LOD	--	<LOD	--
	2	**17**	**9.9**	<LOD	**0.48 J**	**248**	**180**
	3	<LOD	--	**26**	--	**88**	--
	5½	**21**	--	<LOD	--	**48**	--
	7	<LOD	--	<LOD	--	<LOD	--
	10½	<LOD	--	<LOD	--	<LOD	--

Sample Location	Depth (feet)	Arsenic (mg/kg)		Cadmium (mg/kg)		Lead (mg/kg)	
		XRF[1]	Laboratory[2]	XRF[1]	Laboratory[2]	XRF[1]	Laboratory[2]
DP-35	1½	**17**	--	<LOD	--	<LOD	--
	2	**14**	**7.9**	<LOD	0.19 U	**199**	**12**
	3	**18**	--	<LOD	--	<LOD	--
	6½	**23**	--	<LOD	--	<LOD	--
	8	**19**	--	<LOD	--	<LOD	--
	10½	**20**	**6.7 J**	<LOD	0.19 U	<LOD	**30**
	11	**8**	--	**11**	--	**51**	--
DP-36	1½	<LOD	--	<LOD	--	<LOD	--
	2½	**8**	**7.1**	<LOD	0.18 U	**18**	**46**
	6	**15**	--	<LOD	--	**36**	--
	10½	**14**	--	<LOD	--	**19**	--
DP-37	1	**28**	--	**35**	--	<LOD	--
	2½	**24**	--	<LOD	--	<LOD	--
	5½	<LOD	--	<LOD	--	<LOD	--
	10	<LOD	**7.5**	<LOD	0.18 U	**42**	**24**
	10½	<LOD	--	<LOD	--	<LOD	--
DP-38	1	**12**	--	**27**	--	<LOD	--
	2½	<LOD	--	<LOD	--	**2,053**	--
	3	<LOD	**18**	<LOD	**15**	**2,962**	**1,800**
	6	<LOD	--	<LOD	--	**19**	--
	7	**9**	**5.1 J**	**12**	**0.34 J**	**34**	**58**
	11	**14**	--	<LOD	--	**40**	--
	13	<LOD	--	<LOD	--	**14**	--
DP-39	1½	<LOD	--	<LOD	--	<LOD	--
	2½	<LOD	**16**	<LOD	0.24 U	<LOD	10 U
	5½	<LOD	--	**33**	--	**29**	--
	10½	**24**	--	<LOD	--	**53**	--
DP-40	1	**21**	--	<LOD	--	<LOD	--
	2½	**21**	--	**24**	--	<LOD	--
	6	**18**	--	<LOD	--	<LOD	--
	7	**11**	--	<LOD	--	<LOD	--
	11	**15**	--	<LOD	--	**69**	--
	11½	**10**	**6.4 J**	<LOD	0.18 U	**71**	**56**
MTCA Method A Cleanup Level[3]		20		2		250	
Spokane Basin Background Metal Concentration[4]		9.34		0.7		14.9	

Notes

[1]Samples analyzed in the field using a Thermo Scientific Niton XL2 GOLDD XRF Analyzer

[2]Samples analyzed by TestAmerica Laboratories in Spokane Valley, Washington.

[3]Model Toxics Control Act (MTCA) Method A unrestricted land use cleanup levels (CUL).

[4]Background level used for metals in soil is the Washington State Department of Ecology (Ecology) Natural Background 90th percentile value for the Spokane basin (Ecology 1994).

Bold indicates analyte was detected.

Bold and gray shading indicates the analyte was detected above the MTCA Method A CUL.

<LOD = less than level of detection; mg/kg = milligrams per kilogram; J = estimated result; U = analyte was not detected above the reporting limit.

FIGURES

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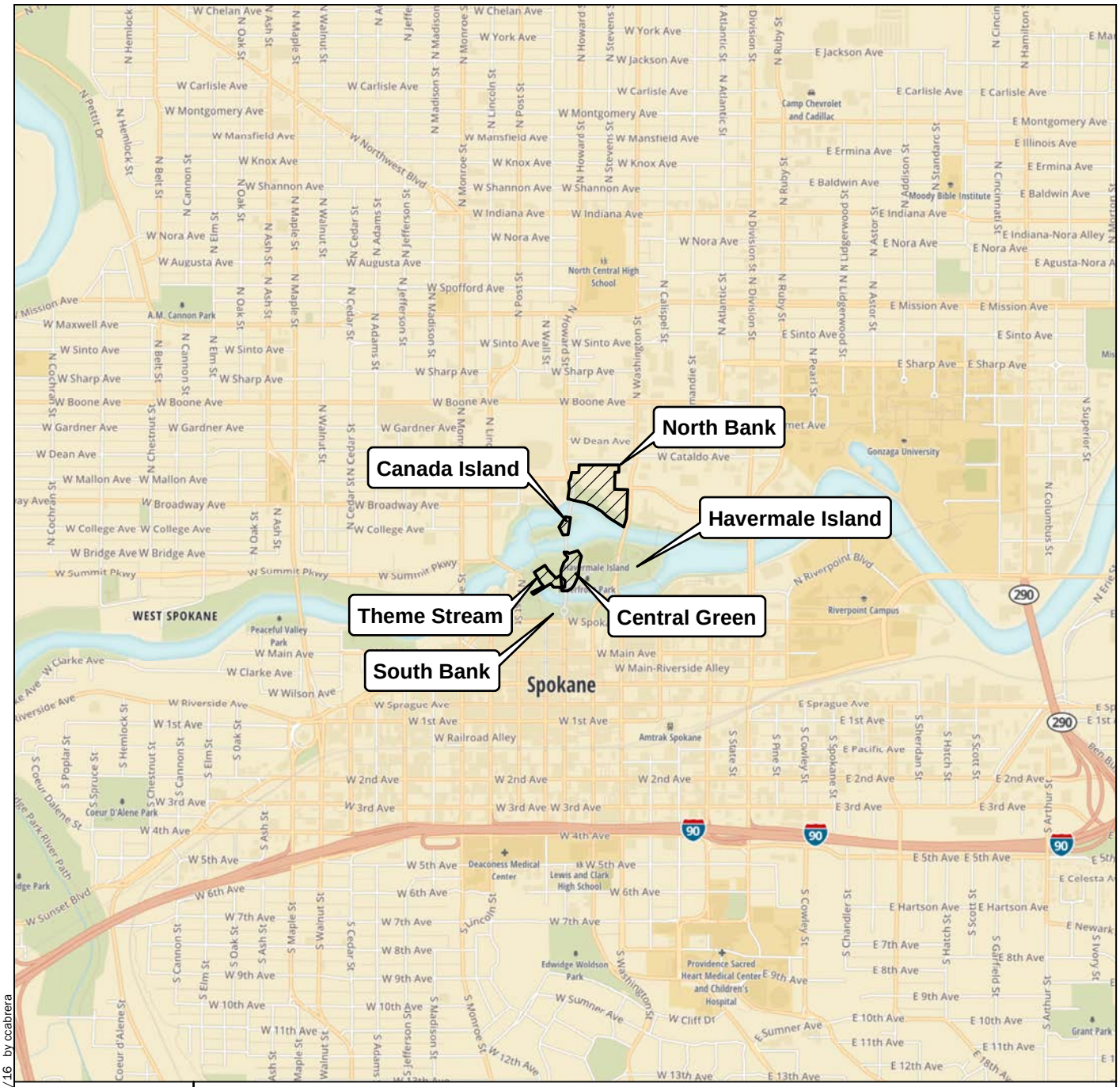


N
W E
S

2,000 0 2,000

Feet

Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Mapbox Open Street Map, 2016

Projection: NAD 1983 UTM Zone 11N

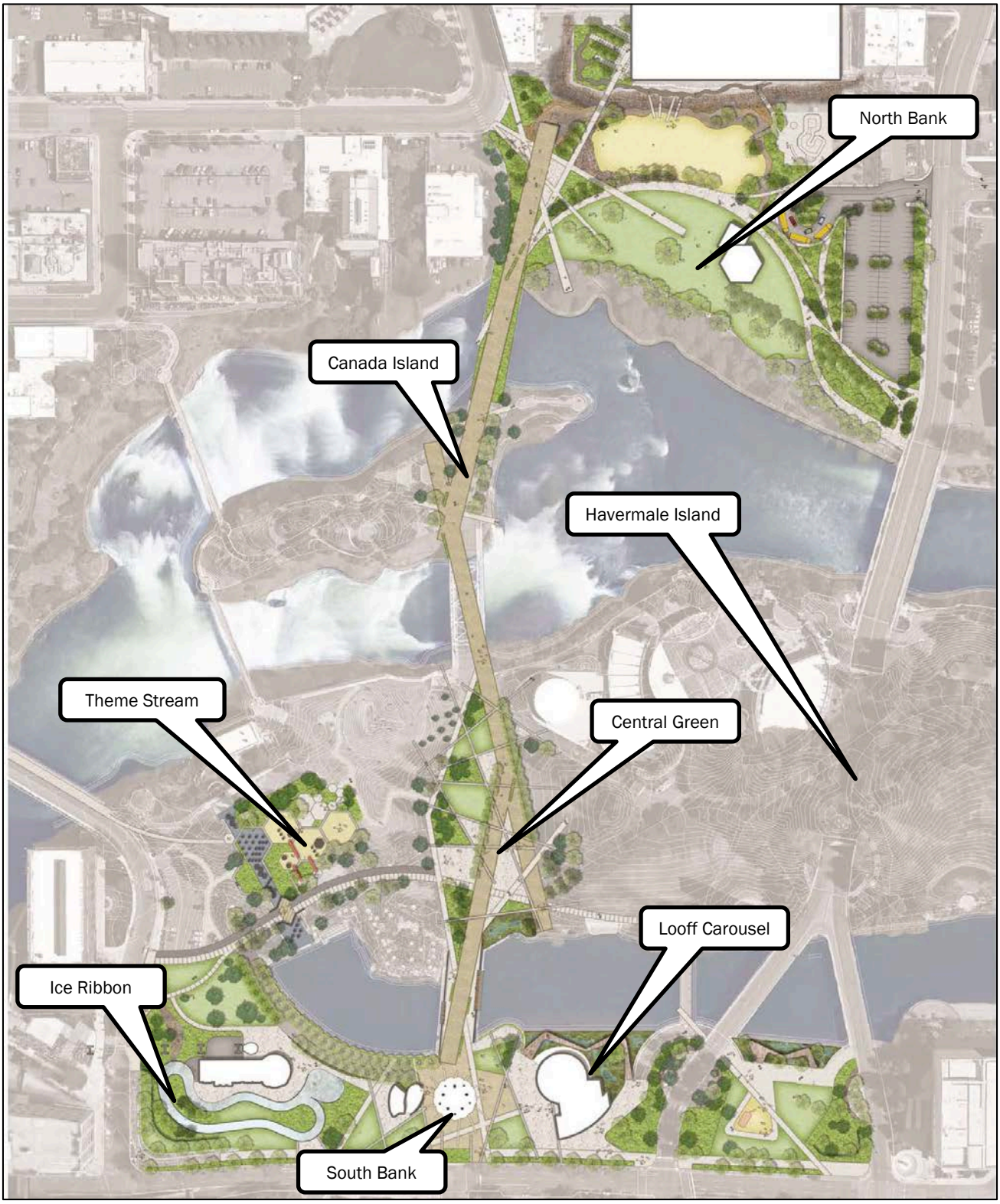
Vicinity Map

Riverfront Park
Spokane, Washington

GeoEngineers

Figure 1

P:\0\0110148\GIS\06\MXD\00110148806_F01_VM.mxd Date Exported: 11/11/16 by ccabrera



Not to Scale

N
W E
S

Notes:

1. The locations of all features shown are approximate. Proposed Improvement areas are shown in color.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Riverfront Park Projectwide Plan Graphic, Berger Partnership

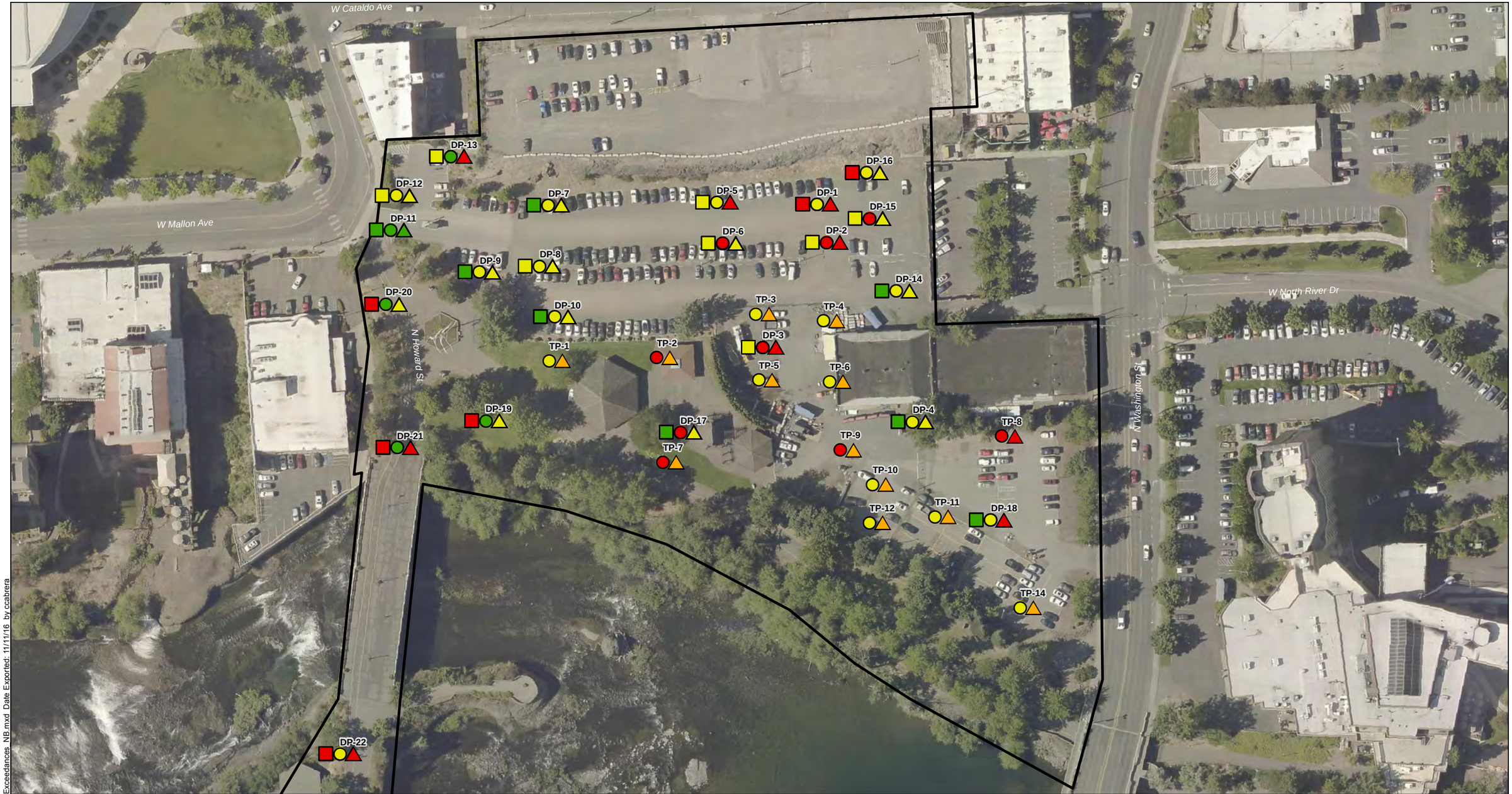
Proposed Park Improvement Areas

Riverfront Park
Spokane, Washington

GeoEngineers

Figure 2

XXXX-XXX-XX Date Exported: 04/09/15



Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. Locations identified as TP-1 through TP-14 completed by CH2M Hill in 2000.

Data Source: Current Imagery flown by Spokane Regional Orthophoto Consortium .

Projection: NAD 1983 StatePlane Washington North FIPS 4601 Feet

Legend

- Contaminated – Concentration greater than MTCA Method A Cleanup Level for one or more COC analyzed
- Contaminated – COCs were not detected, however laboratory reporting limits were greater than the MTCA Method A Cleanup levels
- Impacted – Concentration less than MTCA Method A Cleanup Levels and greater than laboratory reporting limits or twice the available background metals concentration for each COC analyzed
- Clean – Concentration less than laboratory reporting limits or near available background metals concentrations for each COC analyzed

- TPH
- Metals
- PAH
- Approximate Limits of Improvement

N W E S

100 0 100
Feet

Exploration Location with Analytical Results: North Bank

Riverfront Park
Spokane, Washington

GeoEngineers

Figure 3

P:\001101148\GIS\06\MXD\001101148006_F03_Exceedances_NB.mxd Date Exported: 11/11/16 by ccabrera

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Current Imagery flown by Spokane Regional Orthophoto Consortium .

Projection: NAD 1983 StatePlane Washington North FIPS 4601 Feet

Legend

- Contaminated – Concentration greater than MTCA Method A Cleanup Level for one or more COC analyzed
- Impacted – Concentration less than MTCA Method A Cleanup Levels and greater than laboratory reporting limits or twice the available background metals concentration for each COC analyzed
- Clean – Concentration less than laboratory reporting limits or near available background metals concentrations for each COC analyzed
- TPH
- Metals
- PAH
- Approximate Limits of Improvement

N W E S

100 0 100
Feet

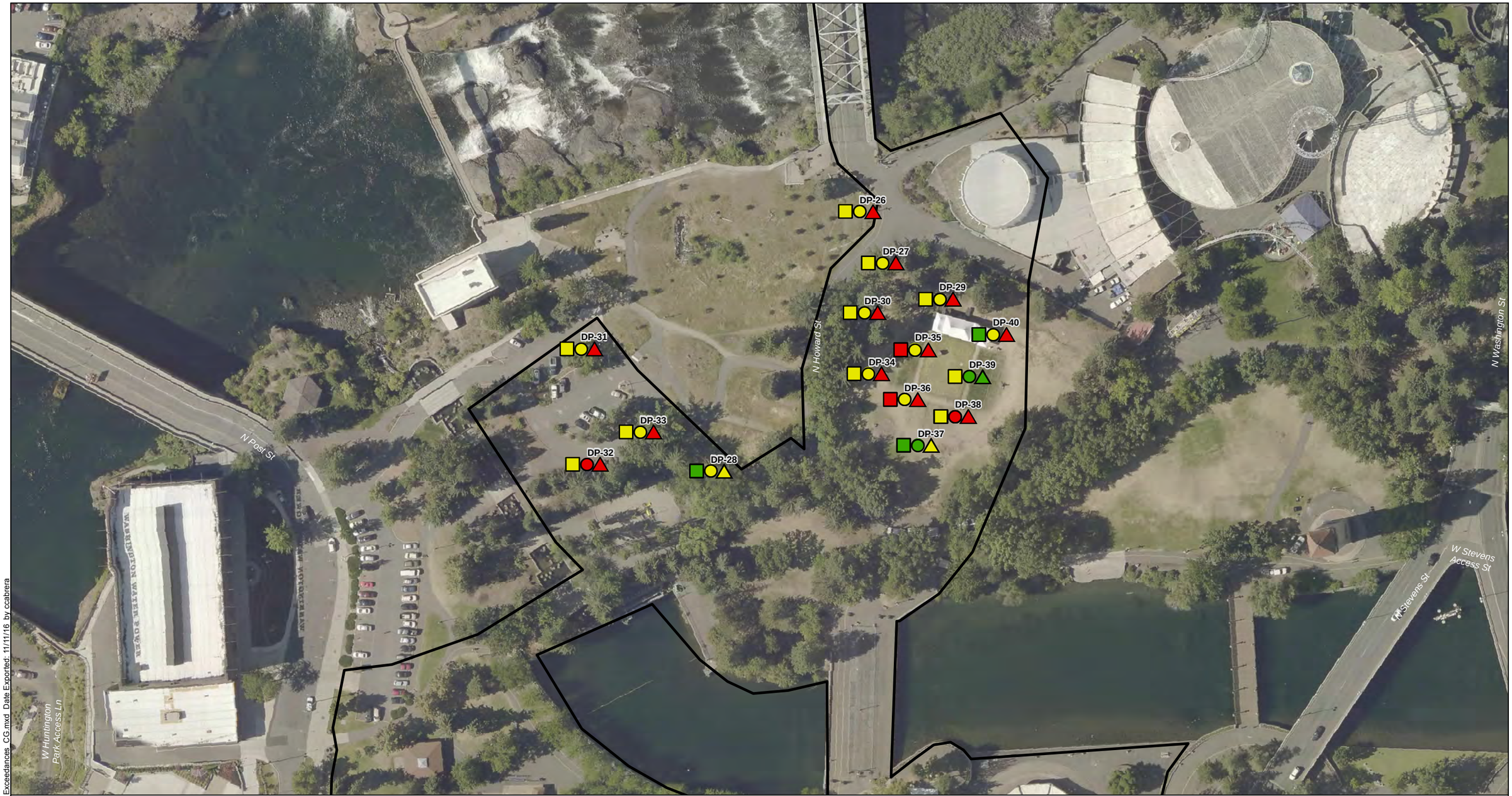
Exploration Location with Analytical Results: Canada Island

Riverfront Park
Spokane, Washington

GeoEngineers

Figure 4

P:\0\01101448\GIS\06MXD\0011014806_F04_Exceedances_CI.mxd Date Exported: 11/04/16 by ccabrera



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Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Current Imagery flown by Spokane Regional Orthophoto Consortium .

Projection: NAD 1983 StatePlane Washington North FIPS 4601 Feet

Legend

- Contaminated – Concentration greater than MTCA Method A Cleanup Level for one or more COC analyzed
- Impacted – Concentration less than MTCA Method A Cleanup Levels and greater than laboratory reporting limits or twice the available background metals concentration for each COC analyzed
- Clean – Concentration less than laboratory reporting limits or near available background metals concentrations for each COC analyzed

- TPH
- Metals
- PAH
- Approximate Limits of Improvement

N W E S

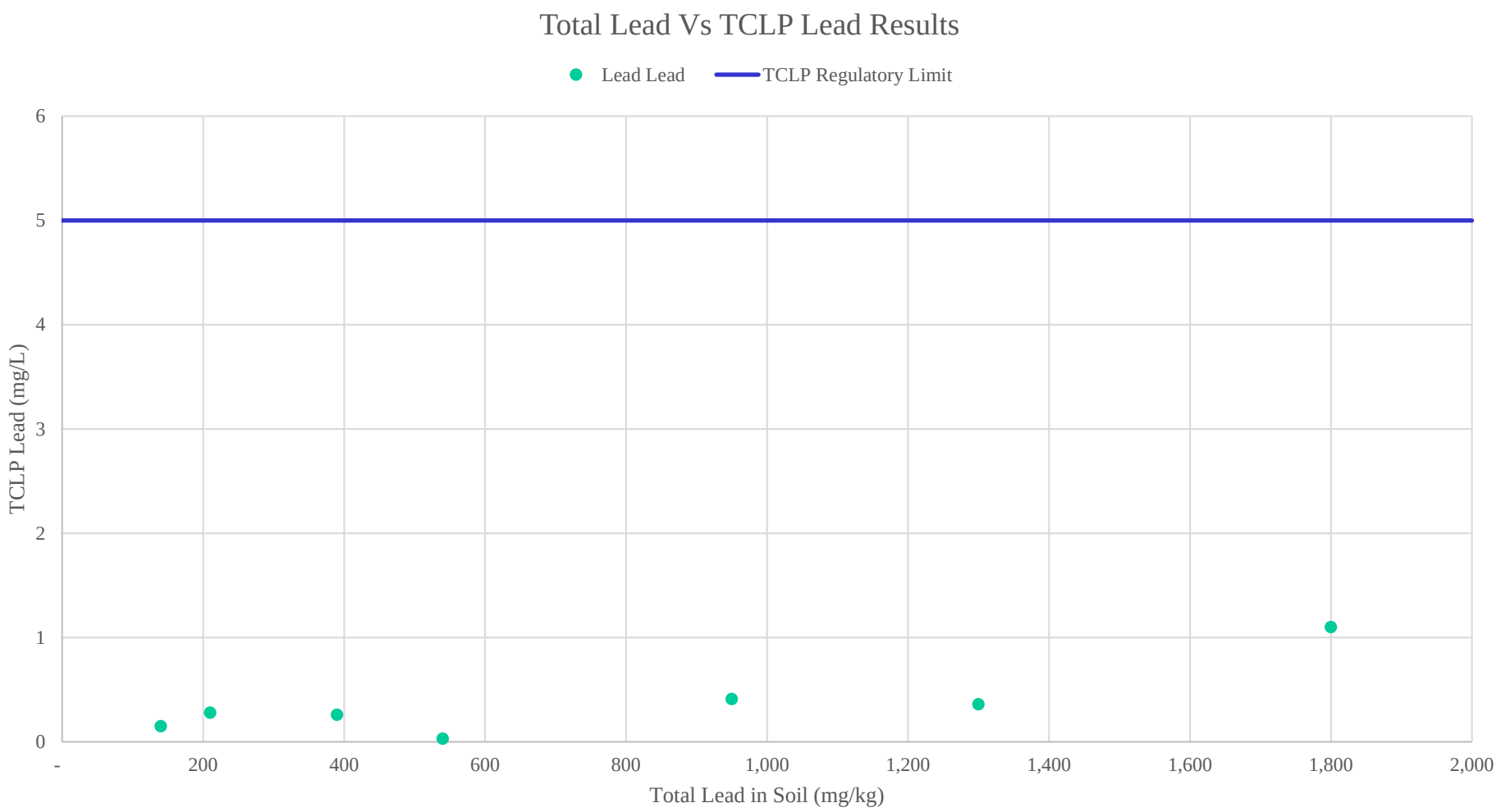
100 0 100
Feet

Exploration Location with Analytical Results: Central Green & Theme Stream

Riverfront Park
Spokane, Washington

GeoEngineers

Figure 5

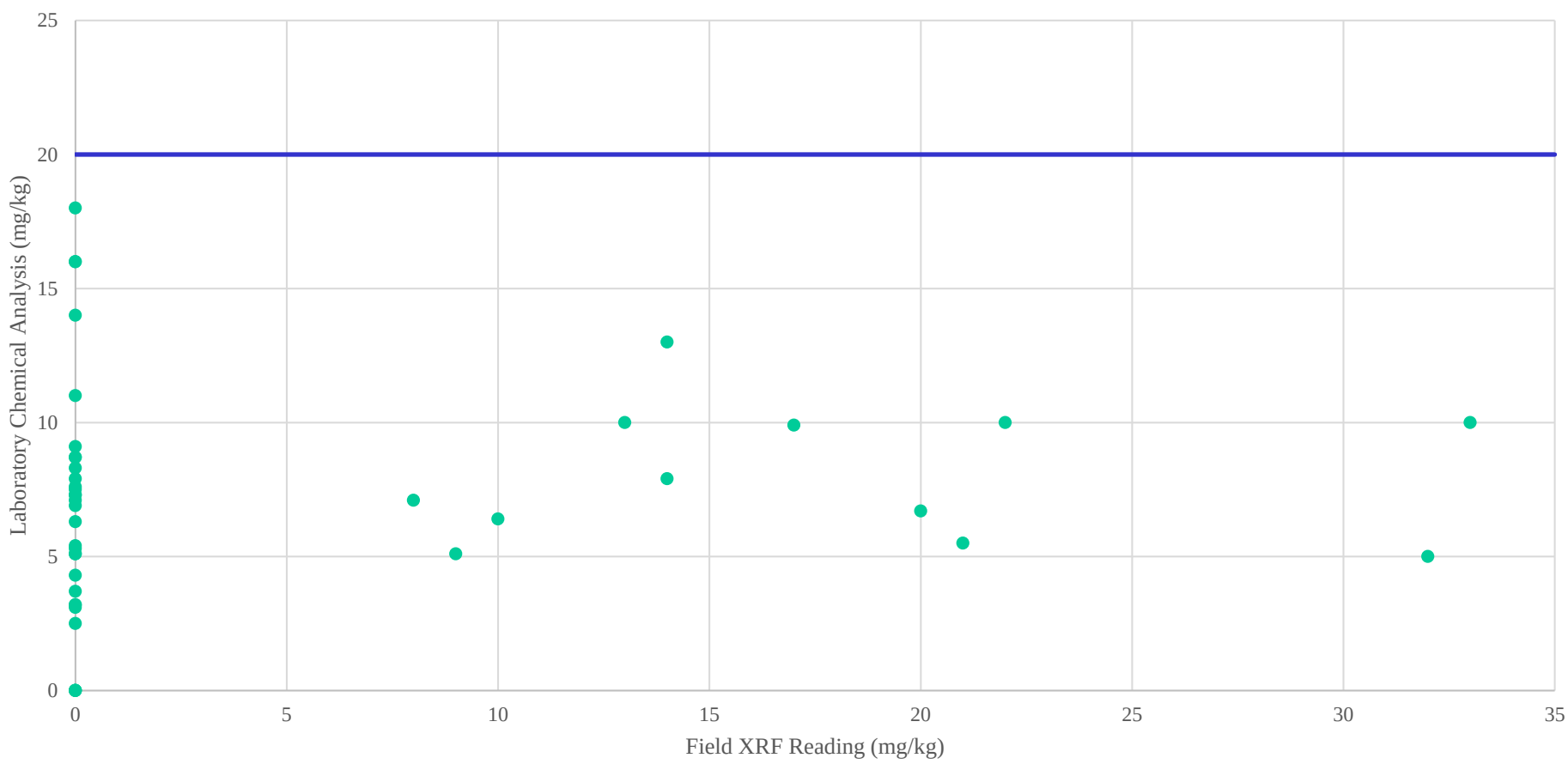


Total Lead and TCLP Concentration Correlation

Riverfront Park
Spokane, Washington

GeoEngineers

Figure 6

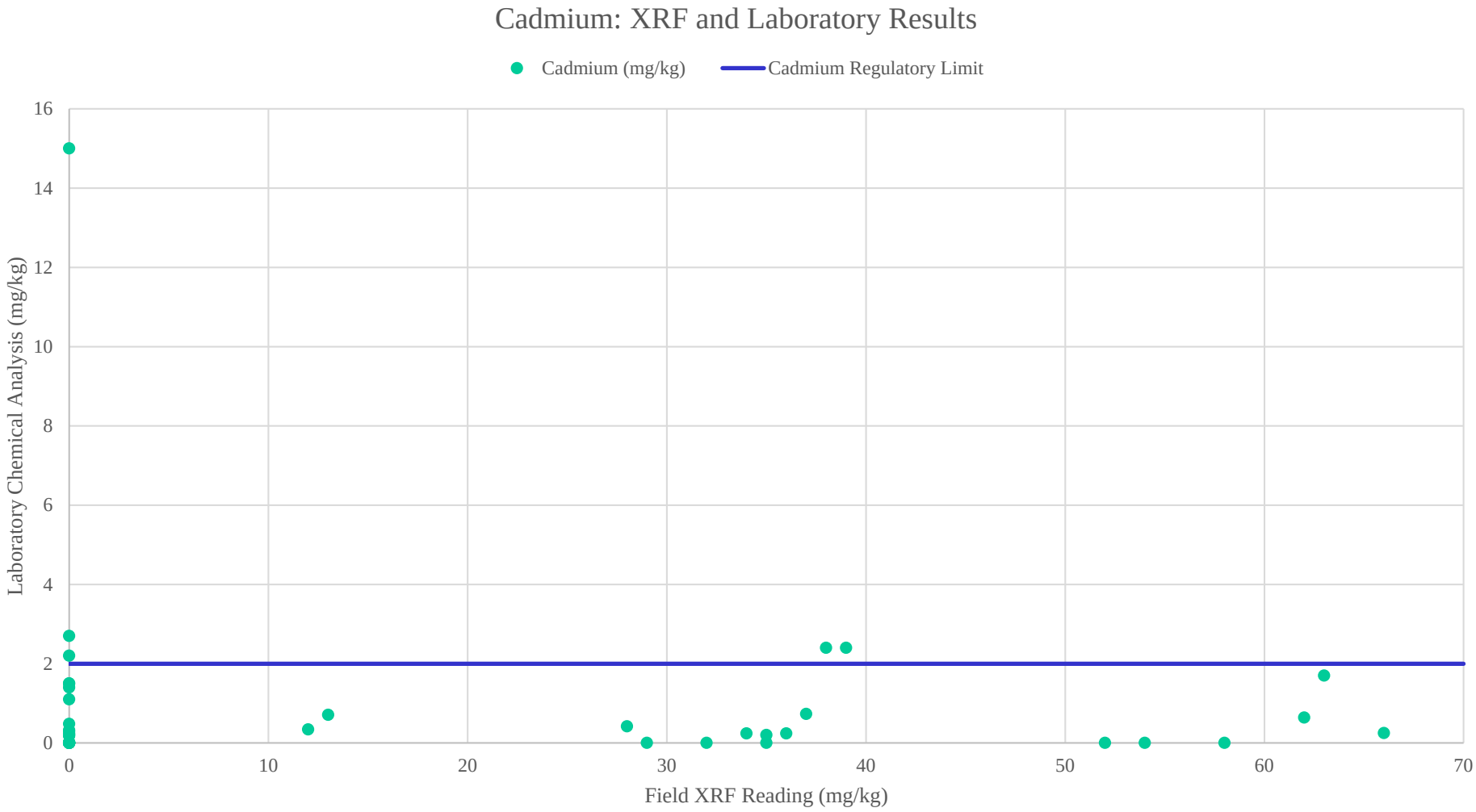


Arsenic: XRF and Laboratory Chemical Analysis Correlations

Riverfront Park
Spokane, Washington

GeoEngineers

Figure 7

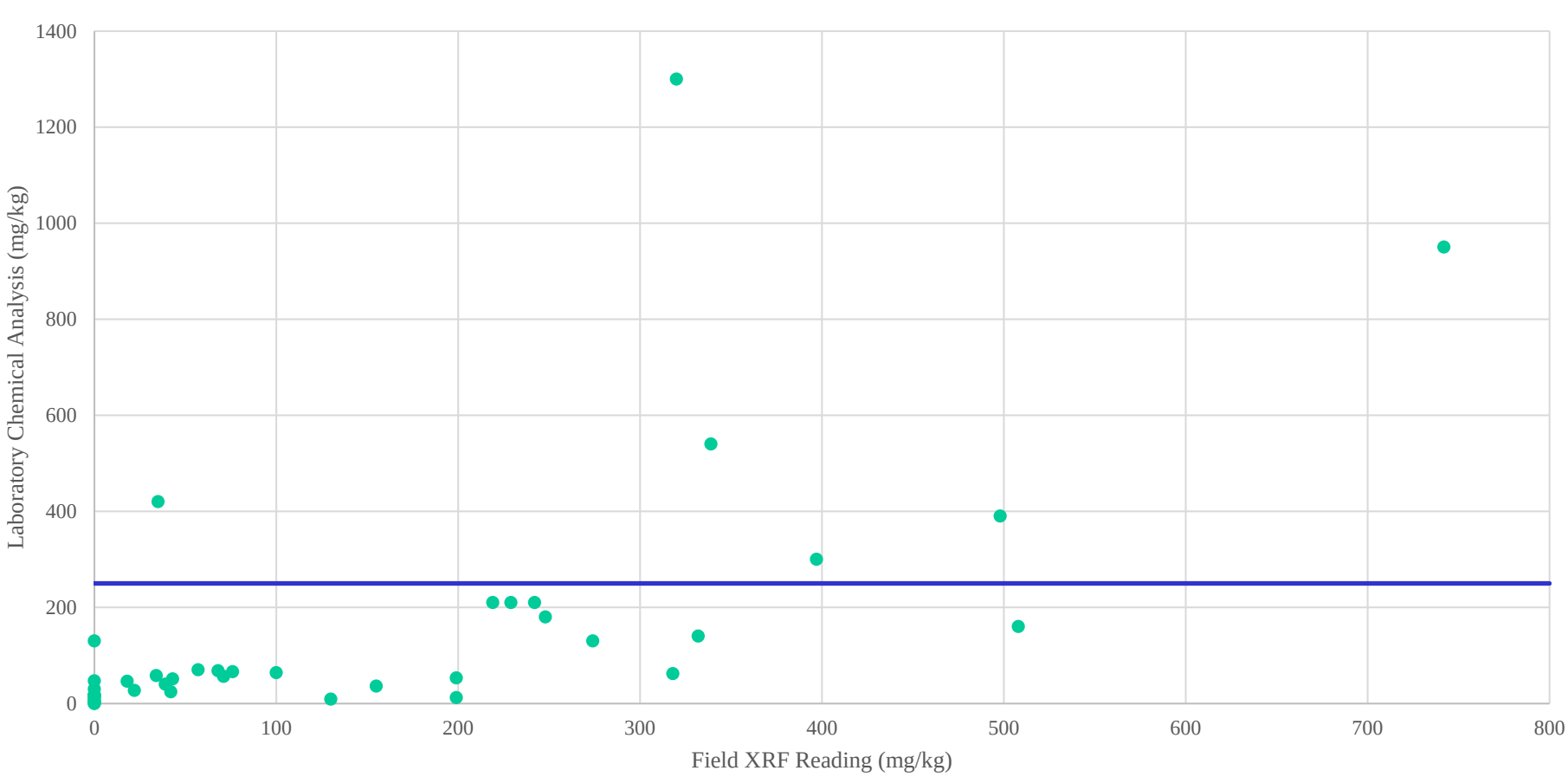


Cadmium: XRF and Laboratory Chemical Analysis Correlations

Riverfront Park
Spokane, Washington

GeoEngineers

Figure 8



Lead: XRF and Laboratory Chemical Analysis Correlations

Riverfront Park
Spokane, Washington

GeoEngineers

Figure 9

Notes:

1.Field XRF Reading = 2,962 mg/kg and Laboratory Chemical Analysis = 1,800 mg/kg (Dp-38, 3 feet bgs) not shown to increase resolution on lower concentrations

Data Source:

APPENDICES

GeoEngineers

APPENDIX A
Field Methods and Boring Logs

APPENDIX A
FIELD METHODS AND BORING LOGS

General Soil Sampling Procedures

Soil samples were obtained using disposable nitrile gloves which were discarded after each use. Samples were placed in 4- or 9-ounce laboratory-supplied sample containers. Sample containers were filled to minimize headspace and labeled with a unique identification. Samples analyzed for VOCs were obtained using EPA Method 5035 sampling procedures. Samples were temporarily stored in an iced cooler before transfer to TestAmerica's Spokane Valley, Washington laboratory for analysis. Chain-of-custody protocols were followed.

Field Screening of Soil Samples

A GeoEngineers' representative performed field screening of soil samples obtained during drilling activities. Field screening results are used as a general guideline to delineate depths with possible petroleum-related contamination. The screening methods used include: (1) visual screening; (2) water sheen screening; and (3) headspace vapor screening using a MiniRae photoionization detector (PID) calibrated to isobutylene.

Visual screening consists of inspecting the soil for stains indicative of petroleum-related contamination. Visual screening is generally more effective when contamination is related to heavy petroleum hydrocarbons such as motor oil, or when hydrocarbon concentrations are high. Water sheen screening is a more sensitive method that has been effective in evaluating whether contaminant concentrations are less than regulatory cleanup guidelines.

Water sheen screening involves placing soil in water and observing the water surface for signs of sheen. Sheen screening might detect both volatile and nonvolatile petroleum hydrocarbons. Sheen classifications are as follows:

No Sheen	No visible sheen on water surface.
Slight Sheen	Light, colorless, dull sheen; spread is irregular, not rapid; sheen dissipates rapidly. Natural organic matter in the soil might produce a slight sheen.
Moderate Sheen	Light to heavy sheen; might have some color/iridescence; spread is irregular to flowing, might be rapid; few remaining areas of no sheen on water surface.
Heavy Sheen	Heavy sheen with color/iridescence; spread is rapid; entire water surface might be covered with sheen.

Headspace vapor screening involved placing a soil sample in a plastic sample bag. Air was captured in the bag, and the bag was shaken to expose the soil to the air trapped in the bag. The probe of the PID was then inserted into the bag to measure VOCs in the air within the bag. In this application, the PID measured concentration of organic vapors ionizable by a 10.6 electron volt (eV) lamp in the range between 1.0 and 2,000 parts per million [ppm]), with a resolution of +/- 2 ppm.

Field screening results are site-specific. The effectiveness of field screening results will vary with temperature, moisture content, organic content, soil type and type and age of contaminant. The presence

or absence of a sheen or headspace vapors does not necessarily indicate the presence or absence of petroleum hydrocarbons.

Field XRF Measurements

Field metal concentrations were collected using XRF analyzer in general accordance with the manufacturer's instructions. This included:

- Cutting the plastic soil collection sleeve in half to allow access to the soil sample collected from the boring. Positioning the XRF instrument against the surface of the soil within the direct push soil sampling sleeve and initiating a reading by squeezing the shutter release and firmly pressing the instrument flat against the sample. Documenting the field XRF readings on field sheets.

- Positioning the XRF instrument against the top soil surface of the soil sample jar and initiating a reading by squeezing the shutter release and firmly pressing the instrument flat against the sample. Documenting the field XRF readings on field sheets. The chemical laboratory was then instructed to collected the sample for metals analysis from the top surface of the sample collection jar.

Location Control

The locations of the borings were established in the field using a hand-held iPad with GPS software. The horizontal accuracy of the hand-held unit is within about 10 feet.

Decontamination Procedures

The objective of the decontamination procedure was to minimize the potential for cross contamination between exploration locations and between individual samples within a specific exploration. A designated decontamination area was established for decontamination of drilling equipment and reusable sampling equipment. Drilling equipment was cleaned using pressure washing equipment.

Sampling or measurement equipment was decontaminated in accordance with the following procedures before each sampling attempt or measurement:

- Brush equipment with a wire brush, if necessary, to remove large particulate matter.
- Rinse with potable tap water.
- Wash with non-phosphate detergent solution (Liquinox® and potable tap water).
- Rinse with potable tap water.
- Rinse with distilled water.

Handling of Investigation-Derived Waste

IDW (drill cuttings and development and purge water), was placed in U.S. Department of Transportation (DOT) approved 55-gallon drums. The drums were labeled with the exploration number, general contents and date. IDW generated on site was placed in drums and is pending pickup for disposal at an appropriate facility.

Disposable items, such as sample tubing, direct-push sampler acrylic sleeves, gloves and paper towels, etc., were placed in plastic bags after use and deposited in trash receptacles for disposal.

Laboratory Analytical Plan

Method Reporting Limit (MRL) goals were based on Ecology MTCA Method A soil cleanup criteria. The following methods were used for the soil samples:

Soil

- TPH (GRPH, DRPH and ORPH) - Northwest Method NWTPH-HCID
- DRPH and ORPH - Northwest Method NWTPH-Dx
- RCRA Metals - EPA Method 6000/7000 Series Methods
- PAHs - EPA Method 8270 SIM
- VOCs - EPA Method 8260c
- PCBs – EPA Method 8082a
- TCLP (for metals) - EPA 6000 Series Methods

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% RETAINED ON NO. 200 SIEVE	SAND AND SANDY SOILS	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS
				SP	POORLY-GRADED SANDS, GRAVELLY SAND
	MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

ADDITIONAL MATERIAL SYMBOLS

SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
	AC	Asphalt Concrete
	CC	Cement Concrete
	CR	Crushed Rock/ Quarry Spalls
	TS	Topsoil/ Forest Duff/Sod

Groundwater Contact

Measured groundwater level in exploration, well, or piezometer

Measured free product in well or piezometer

Graphic Log Contact

Distinct contact between soil strata

Approximate contact between soil strata

Material Description Contact

Contact between geologic units

Contact between soil of the same geologic unit

Sampler Symbol Descriptions

2.4-inch I.D. split barrel

Standard Penetration Test (SPT)

Shelby tube

Piston

Direct-Push

Bulk or grab

Continuous Coring

Blowcount is recorded for driven samplers as the number of blows required to advance sampler 12 inches (or distance noted). See exploration log for hammer weight and drop.

A "P" indicates sampler pushed using the weight of the drill rig.

A "WOH" indicates sampler pushed using the weight of the hammer.

Laboratory / Field Tests

%F	Percent fines
%G	Percent gravel
AL	Atterberg limits
CA	Chemical analysis
CP	Laboratory compaction test
CS	Consolidation test
DS	Direct shear
HA	Hydrometer analysis
MC	Moisture content
MD	Moisture content and dry density
OC	Organic content
PM	Permeability or hydraulic conductivity
PI	Plasticity index
PP	Pocket penetrometer
PPM	Parts per million
SA	Sieve analysis
TX	Triaxial compression
UC	Unconfined compression
VS	Vane shear

Sheen Classification

NS	No Visible Sheen
SS	Slight Sheen
MS	Moderate Sheen
HS	Heavy Sheen
NT	Not Tested

NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

KEY TO EXPLORATION LOGS

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FIGURE A-1

Rev. 02/16

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/20/2016	9/20/2016	4	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800

Latitude / Longitude	System Datum	Groundwater: Date Measured	Depth to Water (ft)	Elevation (ft)
47.665318 / -117.418904		See Remarks		

Notes:

Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
0		27		DP-1 (0.5-1.5) CA			CC	Light gray crushed concrete (very dense, moist)			
							SP	Brown fine to medium sand (dense, moist) (fill)	NS	<1	
							GP	Dark gray gravel with sand and trace silt (dense, moist) (native)			XRF; Pb = 229 ppm; Cd = 63 ppm; As = ND
											XRF; Pb = ND; Cd = 50 ppm; As = ND
				DP-1 (3-4) CA					SS	<1	Groundwater observed at approximately 3 feet below ground surface during drilling Slight odor ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence
4								Boring terminated at 4 feet below ground surface due to refusal			

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-1

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

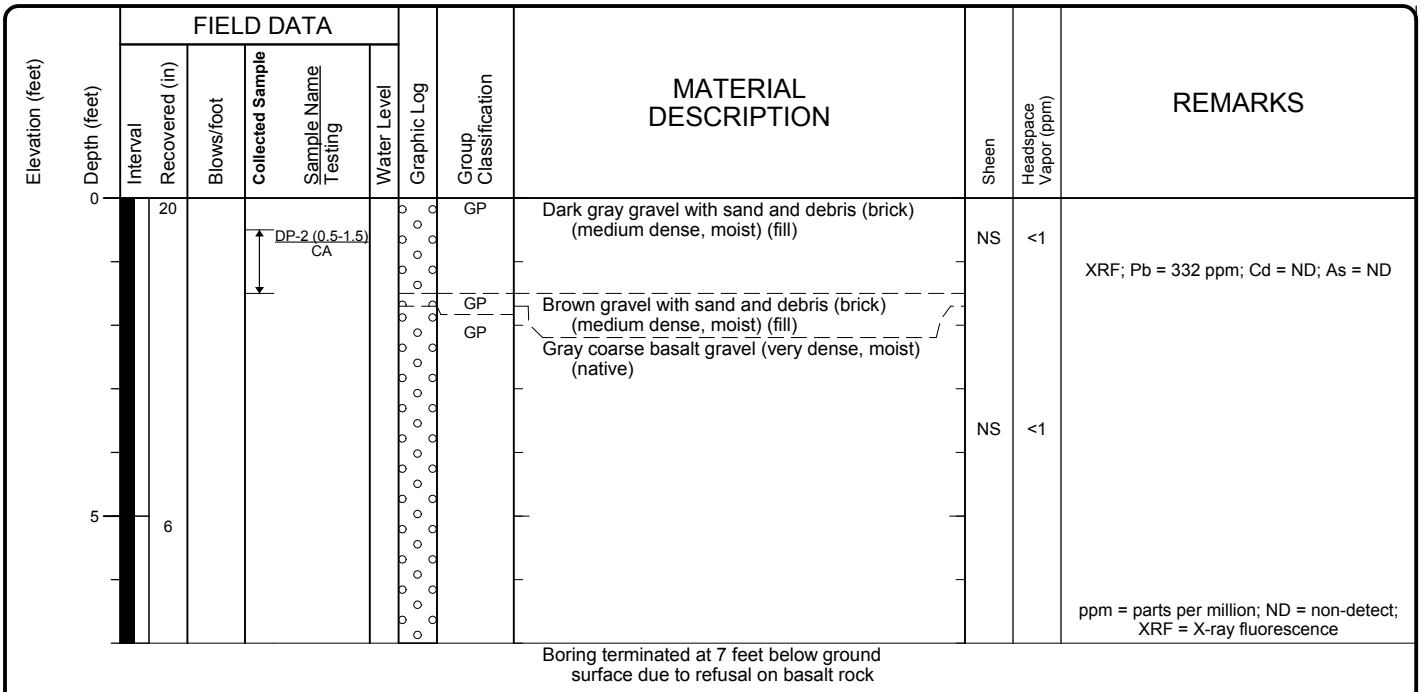
Figure A-2
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/20/2016	9/20/2016	7	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.665208 / -117.418872		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:



Note: See Figure A-1 for explanation of symbols.

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Log of Direct-Push DP-2

GeoEngineers

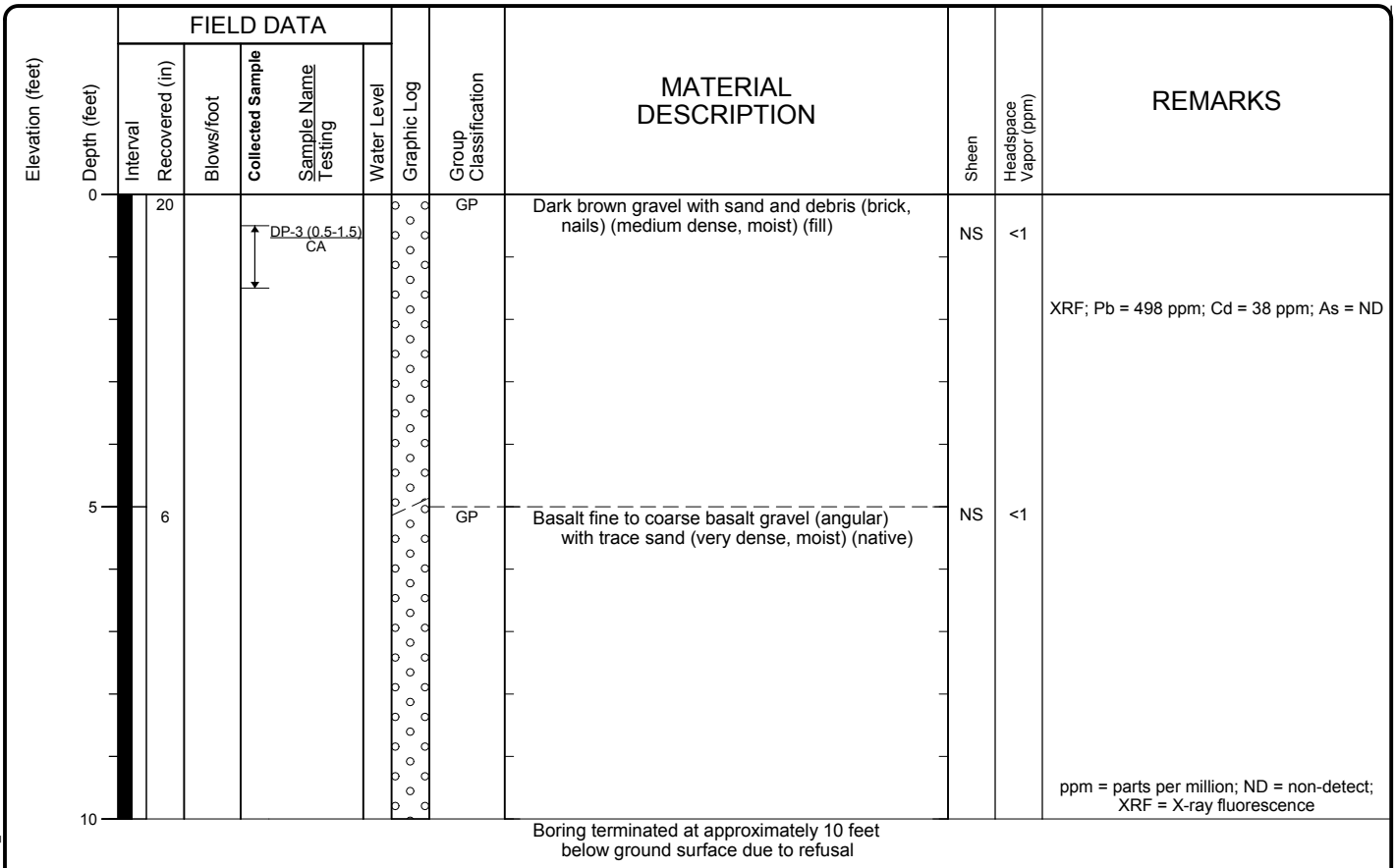
Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-3

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/20/2016	9/20/2016	10	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.664915 / -117.419161		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:



Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-3

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-4
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/20/2016	9/20/2016	15	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800

Latitude / Longitude	System Datum	Groundwater: Date Measured	Depth to Water (ft)	Elevation (ft)
47.664683 / -117.418537		None Observed		

Notes:

Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
0		24		DP-4 (1-2) CA			AC	Approximately 3 inches of asphalt concrete pavement			
							GP	Brown gravel with sand (medium dense, moist) (fill)	NS	<1	XRF; Pb = 43 ppm; Cd = 34 ppm; As = ND
5		20						Grades to trace silt	NS	<1	XRF; Pb = 1,812 ppm; Cd = 61 ppm; As = ND XRF; Pb = 61 ppm; Cd = 69 ppm; As = ND
10		24							NS	<1	XRF; Pb = ND; Cd = 40 ppm; As = ND
							GP	Gray gravel (very dense, moist) (native)			
15											ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-4

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-5
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/20/2016	9/20/2016	2.5	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.66533661 / -117.41932977		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:

Elevation (feet) / Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
0		20		DP-5 (0.5-1.5) CA			GP	Brown fine to coarse gravel with sand (very dense, moist) (fill)	NS	<1	XRF; Pb = 219 ppm; Cd = ND; As = ND
							SP	Dark gray fine to coarse sand with gravel, trace silt and debris (glass, brick) (medium dense, moist) (fill)			ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence
								Boring terminated at approximately 2½ feet below ground surface due to refusal			

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-5

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-6
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/20/2016	9/20/2016	3	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.66521861 / -117.41931177		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		22		DP-6 (1-2) CA			GP	Dark gray gravel with sand (very dense, moist) (fill)	NS	<1	XRF; Pb = 35 ppm; Cd = ND; As = ND
									Boring terminated at approximately 3 feet below ground surface due to refusal			ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-6

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-7
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/20/2016	9/20/2016	4.5	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.665349 / -117.420046		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:

Elevation (feet) / Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
0		30					SP	Brown fine to coarse sand with gravel and trace silt (medium dense, moist) (fill)	NS	<1	XRF; Pb = 189 ppm; Cd = 32 ppm; As = ND
				DP-7 (1.5-2.5) CA			SP-SM	Dark gray sandy gravel with silt and sand (dense, moist) (native)	NS	<1	XRF; Pb = ND; Cd = 52 ppm; As = ND
											ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Boring terminated at approximately 4½ feet below ground surface due to refusal

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-7

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-8
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate\LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/20/2016	9/20/2016	3	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.665176 / -117.420094		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:

Elevation (feet)	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		20		DP-8 (0.5-1.5) CA			SP	Brown fine to coarse sand with occasional gravel (medium dense, moist) (fill)	NS	<1	
								GP	Gray sandy gravel with sand and trace silt (medium dense, moist) (fill)			XRF; Pb = 318 ppm; Cd = 36 ppm; As = ND
										NS	<1	XRF; Pb = ND; Cd = 31 ppm; As = ND
												ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence
									Boring terminated at approximately 3 feet below ground surface due to refusal			

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-8

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-9
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/20/2016	9/20/2016	2	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.665166 / -117.42035		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name / Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		14			DP-9 (0-1) CA			TS	Grass; gray/brown sandy silt with organic matter (roots) (medium dense, moist) (fill) (topsoil)	NS	<1	XRF; Pb = 130 ppm; Cd = 29 ppm; As = 32 ppm ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence
									GP	Brown gravel with sand (medium dense, moist) (fill) (angular basalt gravel at bottom)			
										Boring terminated at approximately 2 feet below ground surface due to refusal			

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-9

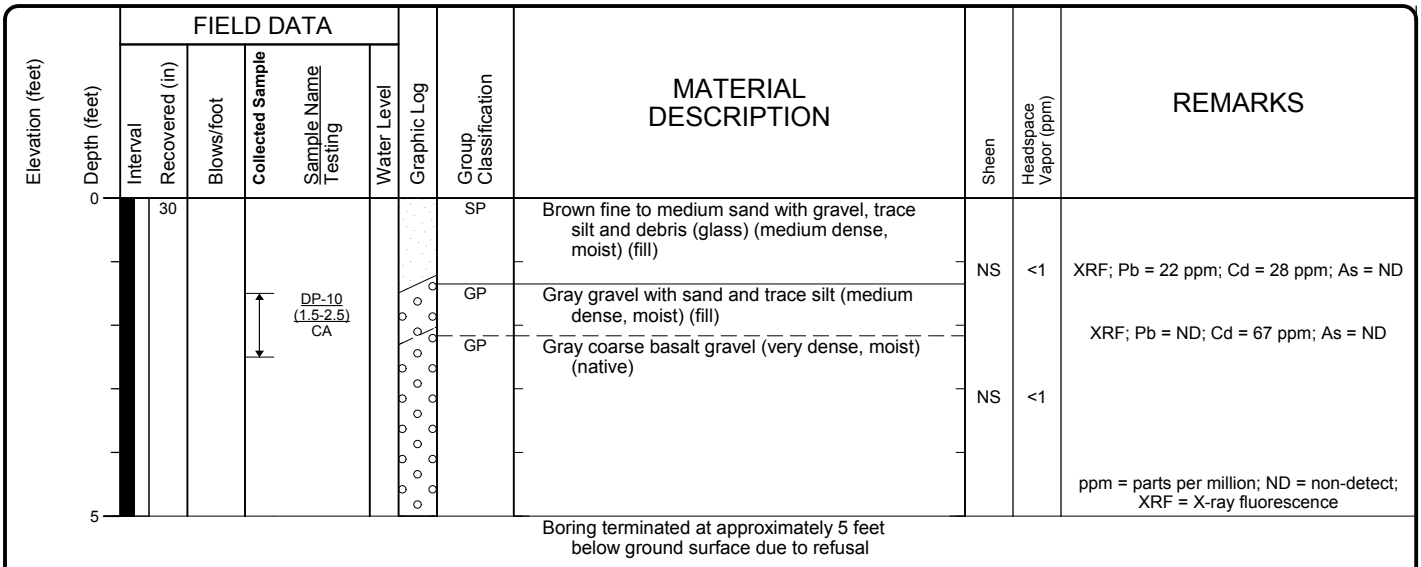
GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-10
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start 9/20/2016 End 9/20/2016	Total Depth (ft) 5	Logged By JML Checked By JRS	Driller Environmental Services Network Northwest	Drilling Method Direct-Push	
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data		Drilling Equipment Geoprobe 7800	
Latitude 47.66502837 Longitude -117.42004038		System Datum		Groundwater Date Measured / Depth to Water (ft) / Elevation (ft)	
Notes:				None Observed	



Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-10

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

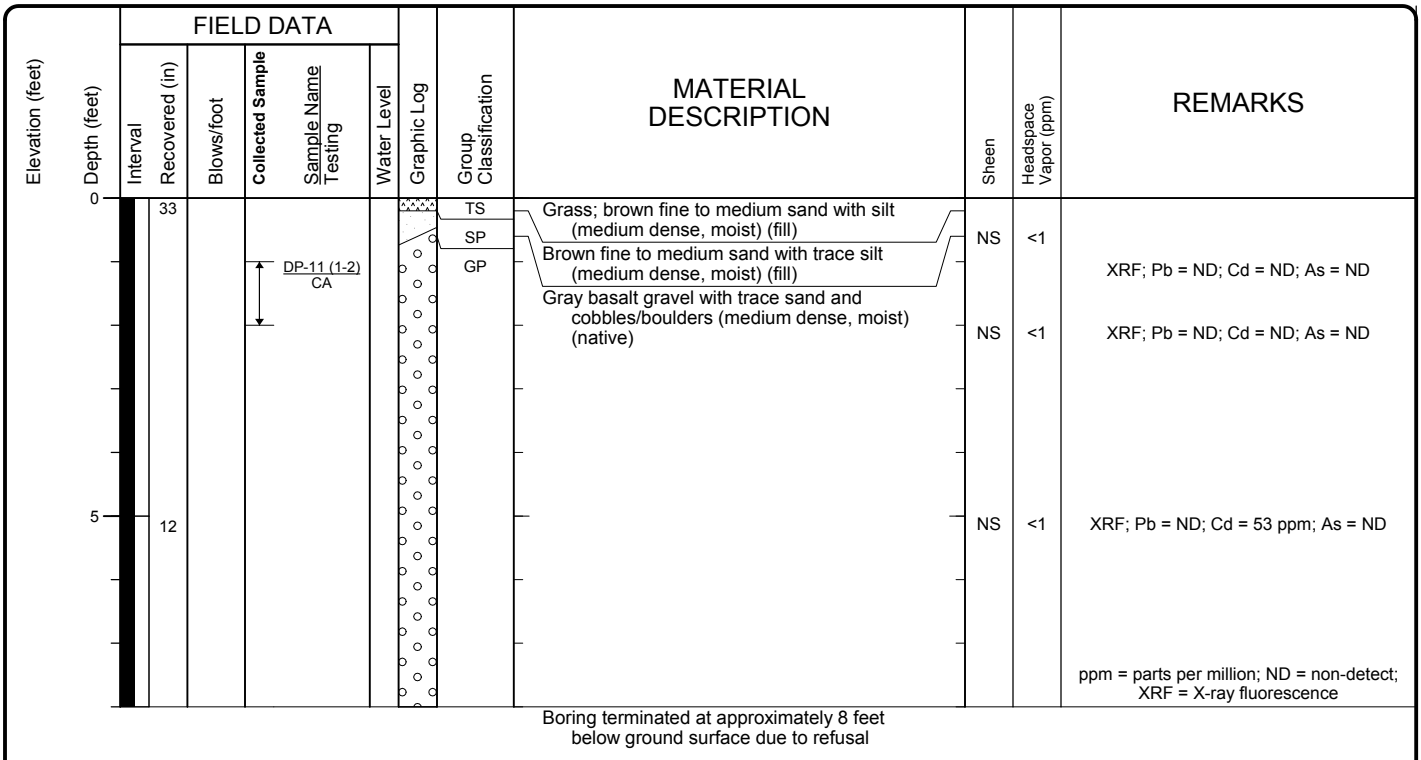
Figure A-11
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate\LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/20/2016	9/20/2016	8	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.665298 / -117.420721		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:



Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-11

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-12
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled	Start 9/20/2016	End 9/20/2016	Total Depth (ft)	2.5	Logged By / Checked By	JML / JRS	Driller	Environmental Services Network Northwest	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum	Undetermined				Hammer Data		Drilling Equipment	Geoprobe 7800		
Latitude / Longitude	47.665398 / -117.42069				System Datum		Groundwater: Date Measured	Depth to Water (ft)	Elevation (ft)	
Notes:								None Observed		

Elevation (feet)	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name / Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		22			DP-12 (1-2) CA			AC	Approximately 2 inches of asphalt concrete pavement	NS	<1	
									GP	Gray gravel with sand (medium dense, moist) (fill)			XRF; Pb = ND ppm; Cd = 62 ppm; As = ND
									GP-GM	Brown gravel with silt and sand (medium dense, moist) (fill)	NS	<1	ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence
										Boring terminated at approximately 2½ feet below ground surface due to refusal			

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-12

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-13
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	Drilled End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/20/2016	9/20/2016	2	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.665501 / -117.42045		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —
Notes:		

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name / Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		14			DP-13 (0-1) CA			AC	Approximately 2 inches asphalt concrete pavement	NS	<1	XRF; Pb = ND; Cd = ND; As = ND
									GP	Brown/gray gravel with trace sand (medium dense, moist) (fill)			
									GP	Gray coarse basalt gravel; fractured cobbles/boulders present (medium dense, moist) (native)			ND = non-detect; XRF = X-ray fluorescence
										Boring terminated at approximately 2 feet below ground surface due to refusal			

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-13

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-14
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled	Start 9/20/2016	End 9/20/2016	Total Depth (ft)	15	Logged By JML / Checked By JRS	Driller	Drilling Method
						Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Undetermined	Hammer Data	Drilling Equipment	Geoprobe 7800
Latitude / Longitude	47.66506 / -117.418585	System Datum	Groundwater	Date Measured: — Depth to Water (ft): None Observed — Elevation (ft):
Notes:				

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name / Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		24			DP-14 (1-2) CA			GP	Gray gravel with sand (loose, moist) (fill)			
									CC	Crushed concrete	NS	<1	
									GP	Dark gray gravel with sand (medium dense, moist)			XRF; Pb = 39 ppm; Cd = ND; As = ND
	5		14								NS	<1	XRF; Pb = ND; Cd = 64 ppm; As = ND
	10		12								NS	<1	XRF; Pb = 19 ppm; Cd = ND; As = ND Large gravel stuck in shoe
	15												ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-14

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-15
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/20/2016	9/20/2016	7	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.665272 / -117.418682		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		18			DP-15 (0.5-1.5) CA			SP	Gray gravel with sand (very dense, moist) (fill)			
										Dark gray sand with gravel (medium dense, moist) (fill)	NS	<1	XRF; Pb = 339 ppm; Cd = ND; As = ND
									GP	Gray basalt gravel (very dense, moist) (native)			
	5		6								NS	<1	XRF; Pb = ND; Cd = ND; As = ND
										Boring terminated at approximately 7 feet below ground surface due to refusal			ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-15

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-16
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/20/2016	9/20/2016	3.5	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.665403 / -117.418687		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:

Elevation (feet) / Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
0		36					GP	Gray gravel with sand (very dense, moist) (fill)			
							CC	Crushed concrete (fill)			
							SP	Brown fine to medium sand (medium dense, moist) (fill)			XRF; Pb = ND; Cd = ND; As = ND
							GP	Dark gray gravel with sand (very dense, moist) (native)			
				DP-16 (2-3) CA					SS	7.7	XRF; Pb = ND; Cd = 66 ppm; As = ND
									HS	12.3	ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Boring terminated at approximately 3½ feet below ground surface due to refusal

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-16

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-17
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/21/2016	9/21/2016	7.5	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.664681 / -117.419527		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		22		DP-17 (1-2) CA			AC	Approximately 2 inches of asphalt concrete pavement			
								SP	Brown fine to medium sand with gravel, trace silt, debris (brick) and organic matter (roots) (medium dense, moist) (fill)	NS	<1	XRF; Pb = 320 ppm; Cd = 39 ppm; As = ND
	5		6							NS	<1	XRF; Pb = 62 ppm; Cd = 59 ppm; As = ND
									Boring terminated at approximately 7½ feet below ground surface due to refusal			ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-17

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-18
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/21/2016	9/21/2016	15	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800

Latitude / Longitude	System Datum	Groundwater: Date Measured	Depth to Water (ft)	Elevation (ft)
47.66439024 / -117.41822345		None Observed		

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		30			DP-18 (1.5-2.5) CA			AC	Approximate 2 inches of asphalt concrete pavement	NS	<1	
									ML	Brown silt with gravel and trace fine to medium sand (medium stiff, moist) (fill)			XRF; Pb = 155 ppm; Cd = 32 ppm; As = ND
									SP	Brown sand with gravel and debris (brick) (medium dense, moist) (fill)			
	5		20						GP	Brown fine to coarse gravel with fine to coarse sand (medium dense, moist)	NS	<1	XRF; Pb = ND; Cd = 40 ppm; As = ND
	10		36								NS	<1	XRF; Pb = ND; Cd = 60 ppm; As = ND
	15												ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Log of Direct-Push DP-18

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-19

Drilled	Start 9/21/2016	End 9/21/2016	Total Depth (ft)	11	Logged By JML Checked By JRS	Driller	Environmental Services Network Northwest	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum		Undetermined			Hammer Data			Drilling Equipment	Geoprobe 7800
Latitude Longitude		47.664739 -117.420353			System Datum			Groundwater Date Measured	Depth to Water (ft): None Observed Elevation (ft)
Notes:									

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name / Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		30						ML	Grass/topsoil; dark brown silt with sand and organic matter (roots, grass) (loose, moist) (fill)	NS	<1	
									SP	Light brown fine to medium sand (medium dense, moist) (fill)	NS	<1	XRF; Pb = ND; Cd = 54 ppm; As = ND
						DP-19 (1.5-2.5) CA			SP	Fine to coarse sand with gravel and trace silt (medium dense, moist) (fill)			
	5		7								NS	<1	XRF; Pb = 42 ppm; Cd = 45 ppm; As = ND
	10		0										ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Boring terminated at approximately 11 feet below ground surface due to refusal

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-19

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-20
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/21/2016	9/21/2016	2.5	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.665087 / -117.420755		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:

Elevation (feet) / Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
0		24		DP-20 (1-2) CA			WD	Landscaping; bark/wood chips			
							SP	Light brown fine sand with trace silt (medium dense, moist) (fill)			
							SP	Gray fine to medium sand, debris (medium dense, moist) (fill)	NS	<1	XRF; Pb = ND; Cd = ND; As = ND
							BRICK	Brick (medium dense, moist) (fill)	NS	<1	XRF; Pb = ND; Cd = ND; As = ND ND = non-detect; XRF = X-ray fluorescence

Boring terminated at approximately 2½ feet below ground surface due to refusal

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-20

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-21
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/21/2016	9/21/2016	2	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.664673 / -117.420735		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name / Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		24						AC	Approximately 2 inches of asphalt concrete pavement			
						DP-21 (1-2) CA			GP	Gray gravel with sand (medium dense, moist) (fill)	NS	<1	XRF; Pb = ND; Cd = 35 ppm; As = 21 ppm
										Grades to coarse gravel (very dense)	NS	<1	XRF; Pb = 38 ppm; Cd = 48 ppm; As = 22 ppm
										Boring terminated at approximately 2 feet below ground surface due to refusal			ppm = parts per million; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-21

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-22
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/21/2016	9/21/2016	6	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.663801 / -117.421035		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:

Elevation (feet)	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		36					WD	Landscape bark/wood chips			
								SP	Light brown fine sand (loose, moist) (fill)	NS	<1	
								SP	Gray fine to coarse sand with gravel and debris (brick) (medium dense, moist) (fill)			XRF; Pb = 508 ppm; Cd = 37 ppm; As = ND
											<1	
					DP-22 (2-3) CA							
										NS	<1	
	5		10							NS	<1	

ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Boring terminated at approximately 6 feet below ground surface due to refusal

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-22

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-23
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/21/2016	9/21/2016	15	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800

Latitude / Longitude	System Datum	Groundwater: Date Measured	Depth to Water (ft)	Elevation (ft)
47.66354 / -117.420959		None Observed		

Notes:

Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name / Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
0		32			DP-23 (1-2) CA			SP	Brown fine to coarse sand with occasional gravel (medium dense, moist) (fill)			
								SP	Gray sand with gravel and debris (asphalt, brick) (medium dense, moist) (fill)	NS	78.8	XRF; Pb = ND; Cd = ND; As = ND
								SP	Light gray fine to coarse sand with silt and gravel (medium dense, moist) (fill)	NS	<1	
									Grades to brown			
5		20								NS	<1	XRF; Pb = 32 ppm; Cd = 27 ppm; As = ND
									Cobble			
10		14						GP	Brown fine to coarse gravel with sand and trace silt (medium dense, moist) (fill)	NS	<1	XRF; Pb = 81 ppm; Cd = ND; As = ND
15												ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-23

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-24
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/21/2016	9/21/2016	15	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude 47.66356282 **Longitude** -117.4211501	System Datum	Groundwater: Date Measured / Depth to Water (ft) / Elevation (ft)
Notes:		None Observed

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		22			DP-24 (1-2) CA			SP-SM	Brown fine to medium sand with silt and organic matter (roots, wood chips) (loose, moist) (fill)	NS	<1	
									SM	Light brown fine to medium sand with organic matter (roots, wood chips) (loose, moist)	NS	<1	XRF; Pb = 68 ppm; Cd = ND; As = ND
									GP	Light gray fine to coarse gravel with fine to coarse sand (medium dense, moist) (fill)			
	5		2							Gray broken asphalt cobbles (very dense, moist) (fill)			Poor recovery
	10		13								NS	<1	XRF; Pb = 27 ppm; Cd = 27 ppm; As = ND
	15												ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-24

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-25
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/21/2016	9/21/2016	14.5	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.6634204 / -117.42120645		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		21		DP-25 (1-2) CA			SP-SM	Brown fine to coarse sand with silt, occasional gravel and organic matter (leaves, roots) (loose, moist) (fill)	NS	<1	
								SP				XRF; Pb = 742 ppm; Cd = ND; As = ND
								GP	Brown fine to coarse sand with gravel and debris (brick) (medium dense, moist) (fill)			
									Gray fine to coarse gravel with occasional sand (very dense, moist) (fill)			
	5		8						Grades to increased sand and brick content	NS	<1	XRF; Pb = 113 ppm; Cd = ND; As = ND
	10		12					GP	Gray-yellow fine to coarse gravel with fine to coarse sand, trace silt and organic matter (wood chunks) (medium dense, moist) (fill)	NS	<1	XRF; Pb = 148 ppm; Cd = ND; As = ND

Boring terminated at approximately 14½ feet below ground surface due to refusal

ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-25

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-26
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/21/2016	9/21/2016	2.5	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.66247379 / -117.4209842		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:

Elevation (feet) / Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
0		24					SP	Grass; brown fine to medium sand with occasional gravel and organic matter (roots, wood)			
							SP	Light gray gravel with sand and debris (brick, wood) (medium dense, moist) (fill)			XRF; Pb = 274 ppm; Cd = ND; As = 22 ppm
				DP-26 (1.5-2.5) CA			GP-GM	Brown gravel with silt (dense, moist) (fill)			XRF; Pb = 619 ppm; Cd = 26 ppm; As = ND
								Boring terminated at approximately 2½ feet below ground surface due to refusal			ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-26

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-27
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start 9/21/2016 End 9/21/2016	Total Depth (ft) 15	Logged By JML Checked By JRS	Driller Environmental Services Network Northwest	Drilling Method Direct-Push	
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data		Drilling Equipment Geoprobe 7800	
Latitude 47.66232285 Longitude -117.42089462		System Datum		Groundwater Date Measured / Depth to Water (ft) / Elevation (ft)	
Notes:				None Observed	

Elevation (feet) / Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
0		30					WD	Wood chips/landscape bark			
							SP	Light brown fine to medium sand with organic matter (roots) (medium dense, moist) (fill)	NS	<1	
				DP-27 (1.5-2.5) CA			SP	Brown fine to coarse sand with gravel and trace silt (medium dense, moist) (fill)	NS	<1	XRF; Pb = 57 ppm; Cd = ND; As = 13 ppm
5		20							NS	<1	XRF; Pb = 77 ppm; Cd = 26 ppm; As = ND
									NS	<1	
							GP	Gray broken basalt gravel (very dense, moist) (fill)			
10		6							NS	<1	XRF; Pb = 74 ppm; Cd = ND; As = ND
15											ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-27

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-28
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\01101\148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled	Start 9/21/2016	End 9/21/2016	Total Depth (ft)	12	Logged By JML Checked By JRS	Driller	Environmental Services Network Northwest	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum	Undetermined		Hammer Data			Drilling Equipment	Geoprobe 7800		
Latitude Longitude	47.66174792 -117.42166555		System Datum			Groundwater Date Measured	Depth to Water (ft)	Elevation (ft)	
Notes:							None Observed		

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		24						ML	Grass/topsoil; dark brown silt with sand and organic matter (roots, grass) (loose, moist) (fill)	NS	<1	
						DP-28 (1-2) CA			SP	Light brown fine to medium sand (loose, moist) (fill)	NS	<1	XRF; Pb = 199 ppm; Cd = ND; As = ND
									SP	Reddish brown fine to coarse sand with gravel and trace silt (medium dense, moist) (fill)			
	5		15								NS	<1	XRF; Pb = 158 ppm; Cd = 25 ppm; As = 31 ppm
											NS	<1	
	10		10								NS	<1	XRF; Pb = 130 ppm; Cd = ND; As = ND
													ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence
										Boring terminated at approximately 12 feet below ground surface due to refusal			

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-28

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-29
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/21/2016	9/21/2016	15	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800

Latitude / Longitude	System Datum	Groundwater: Date Measured	Depth to Water (ft)	Elevation (ft)
47.66221316 / -117.42066113		None Observed		

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		38					ML	Grass; dark brown silt with sand and organic matter (roots, grass) (loose, moist) (fill)	NS	<1	
								SP	Light brown fine to medium sand (loose, moist) (fill)			
					DP-29 (1.5-2.5) CA			SP	Brown fine to coarse sand with gravel, trace silt and debris (brick) (medium dense, moist) (fill)	NS	<1	XRF; Pb = 38 ppm; Cd = 50 ppm; As = ND
												XRF; Pb = ND; Cd = ND; As = ND
	5		36							NS	<1	XRF; Pb = ND; Cd = ND; As = 13 ppm
								GP	Brown fine to coarse gravel with fine to coarse sand, trace silt and clay (medium dense, moist) (fill)	NS	<1	
												XRF; Pb = ND; Cd = 36 ppm; As = ND
	10		15		DP-29 (10-11) CA					NS	<1	XRF; Pb = ND; Cd = ND; As = 14 ppm
	15											ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-29

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-30
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\01101148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled: Start 9/21/2016 End 9/21/2016	Total Depth (ft): 15	Logged By: JML Checked By: JRS	Driller: Environmental Services Network Northwest	Drilling Method: Direct-Push	
Surface Elevation (ft) Vertical Datum: Undetermined		Hammer Data:		Drilling Equipment: Geoprobe 7800	
Latitude: 47.662184 Longitude: -117.420982		System Datum:		Groundwater: Date Measured / Depth to Water (ft) / Elevation (ft): None Observed	
Notes:					

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		30						ML	Grass, silt with sand (loose, moist) (fill)			
									SP	Brown fine to medium sand with occasional gravel	NS	<1	
						DP-30 (1.5-2.5) CA				Grades to increased gravel content	NS	<1	XRF; Pb = 25 ppm; Cd = 48 ppm; As = 17 ppm
	5		33							Brick in sample	NS	<1	XRF; Pb = ND; Cd = 49 ppm; As = ND
											NS	<1	
	10		18								NS	<1	XRF; Pb = ND; Cd = ND; As = 27 ppm
									GP	Brown gravel with sand (medium dense, moist) (fill)			
	15												ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-30

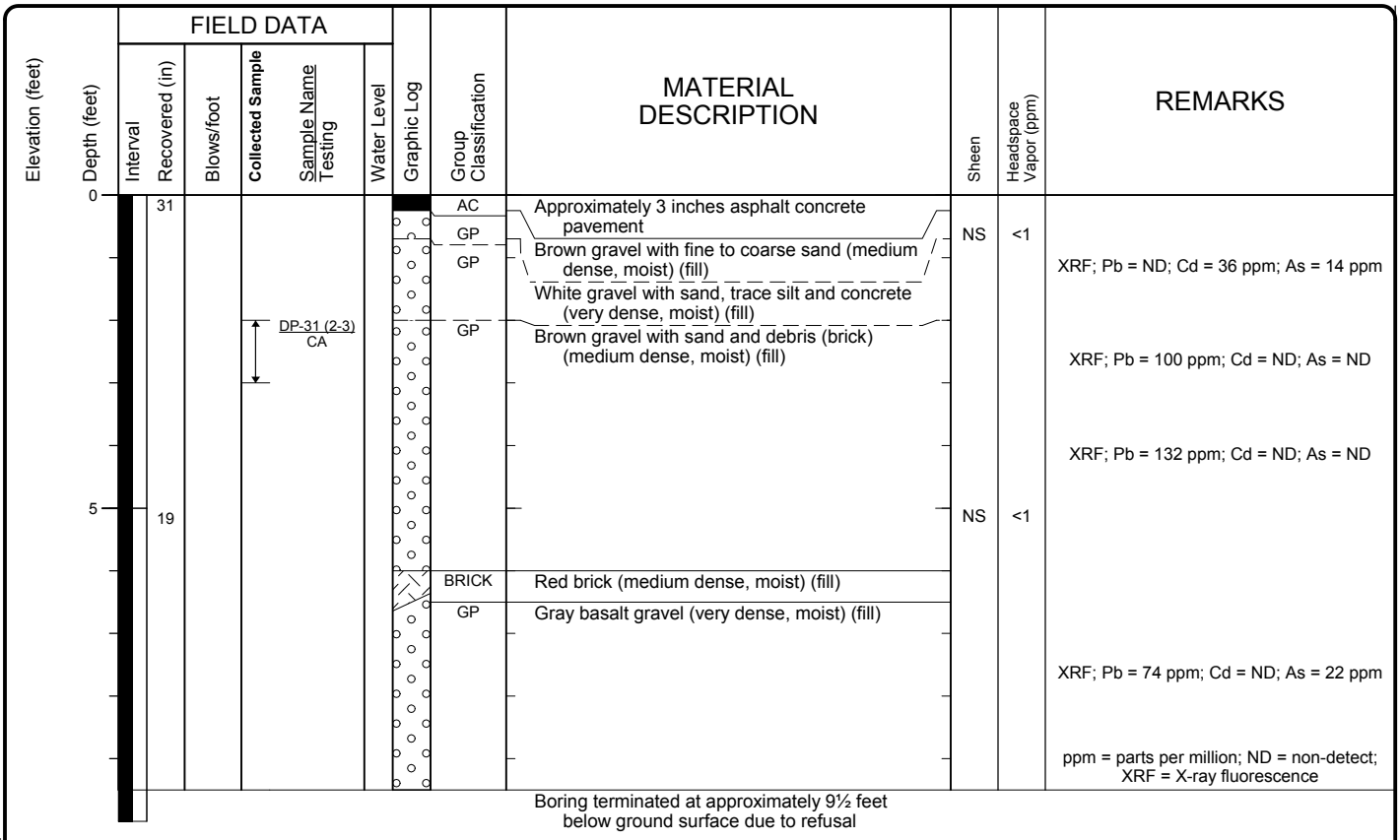
GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-31
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled	Start 9/22/2016	End 9/22/2016	Total Depth (ft)	9.5	Logged By JML Checked By JRS	Driller	Environmental Services Network Northwest	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum	Undetermined		Hammer Data			Drilling Equipment	Geoprobe 7800		
Latitude Longitude	47.66211605 -117.42219355		System Datum			Groundwater Date Measured	Depth to Water (ft)	Elevation (ft)	
Notes:							None Observed		



Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-31

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-32
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/22/2016	9/22/2016	14	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.66178332 / -117.42218872		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		30					AC	Approximately 3 inches asphalt concrete pavement			
								SP	Brown fine to coarse sand with fine to coarse gravel and debris (brick) (medium dense, moist) (fill)	NS	<1	
					DP-32 (1.5-2.5) CA					NS	<1	XRF; Pb = 397 ppm; Cd = ND; As = ND
	5		30							NS	<1	
								SP	White fine to coarse sand with gravel and concrete (medium dense, moist) (fill)			XRF; Pb = ND; Cd = 24 ppm; As = 12 ppm
								GP	Gray fine to coarse gravel with occasional fine to coarse sand (very dense, moist) (fill)			
										NS	<1	XRF; Pb = 23 ppm; Cd = ND; As = ND
	10		3							NS	<1	XRF; Pb = 232 ppm; Cd = ND; As = ND
									Boring terminated at approximately 14 feet below ground surface due to refusal			ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate\LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Log of Direct-Push DP-32

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-33
Sheet 1 of 1

Drilled	Start 9/22/2016	End 9/22/2016	Total Depth (ft)	11	Logged By	JML	Driller	Environmental Services Network Northwest	Drilling Method	Direct-Push
					Checked By	JRS				

Surface Elevation (ft) Vertical Datum	Undetermined	Hammer Data		Drilling Equipment	Geoprobe 7800
Latitude	47.66186998	System Datum		Groundwater	
Longitude	-117.42195816			Date Measured	Depth to Water (ft) / Elevation (ft)
Notes:				None Observed	

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		24		DP-33 (1-2) CA			AC	Approximately 2 inches asphalt concrete pavement			
								GP	Brown gravel with sand and debris (brick) (medium dense, moist) (fill)	NS	<1	
										NS	<1	XRF; Pb = 242 ppm; Cd = 13 ppm; As = ND
									Grades to gray			
	5		14							NS	<1	XRF; Pb = 101 ppm; Cd = 24 ppm; As = 27 ppm
	10		12							NS	<1	
								ML	Red/brown silt with sand (stiff, moist) (fill)			XRF; Pb = ND; Cd = ND; As = ND
									Boring terminated at approximately 11 feet below ground surface due to refusal			ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-33

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-34
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/22/2016	9/22/2016	11.5	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude / Longitude	**System Datum**	**Groundwater**
47.662007 / -117.420976		Date Measured: — Depth to Water (ft): None Observed — Elevation (ft): —

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name / Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		34						SP	Brown sand with silt and organic matter (roots, grass) (medium dense, moist) (fill)	NS	<1	
									SP	Light brown fine to medium sand with occasional gravel (medium dense, moist) (fill)	NS	<1	XRF; Pb = ND; Cd = ND; As = 20 ppm
						DP-34 (1.5-2.5) CA				Brown fine to coarse sand with gravel and debris (brick) (medium dense, moist) (fill)			XRF; Pb = 248 ppm; Cd = ND; As = 17 ppm
									SP	White sand with gravel, trace silt and concrete			XRF; Pb = 88 ppm; Cd = 26 ppm; As = ND
	5		30								NS	<1	
									SP	Brown fine to coarse sand with gravel (medium dense, moist) (fill)			XRF; Pb = 48 ppm; Cd = ND; As = 21 ppm
									SP-SM	Brown fine to coarse sand with silt and gravel (medium dense, moist) (fill)	NS	<1	XRF; Pb = ND; Cd = ND; As = ND
	10		18						CC	White/gray fine to coarse gravel with sand and concrete (medium dense, moist) (fill)	NS	<1	XRF; Pb = ND; Cd = ND; As = ND
									GP	Gray basalt gravel (very dense, moist) (fill)			ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence
										Boring terminated at approximately 11½ feet below ground surface due to refusal			

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-34

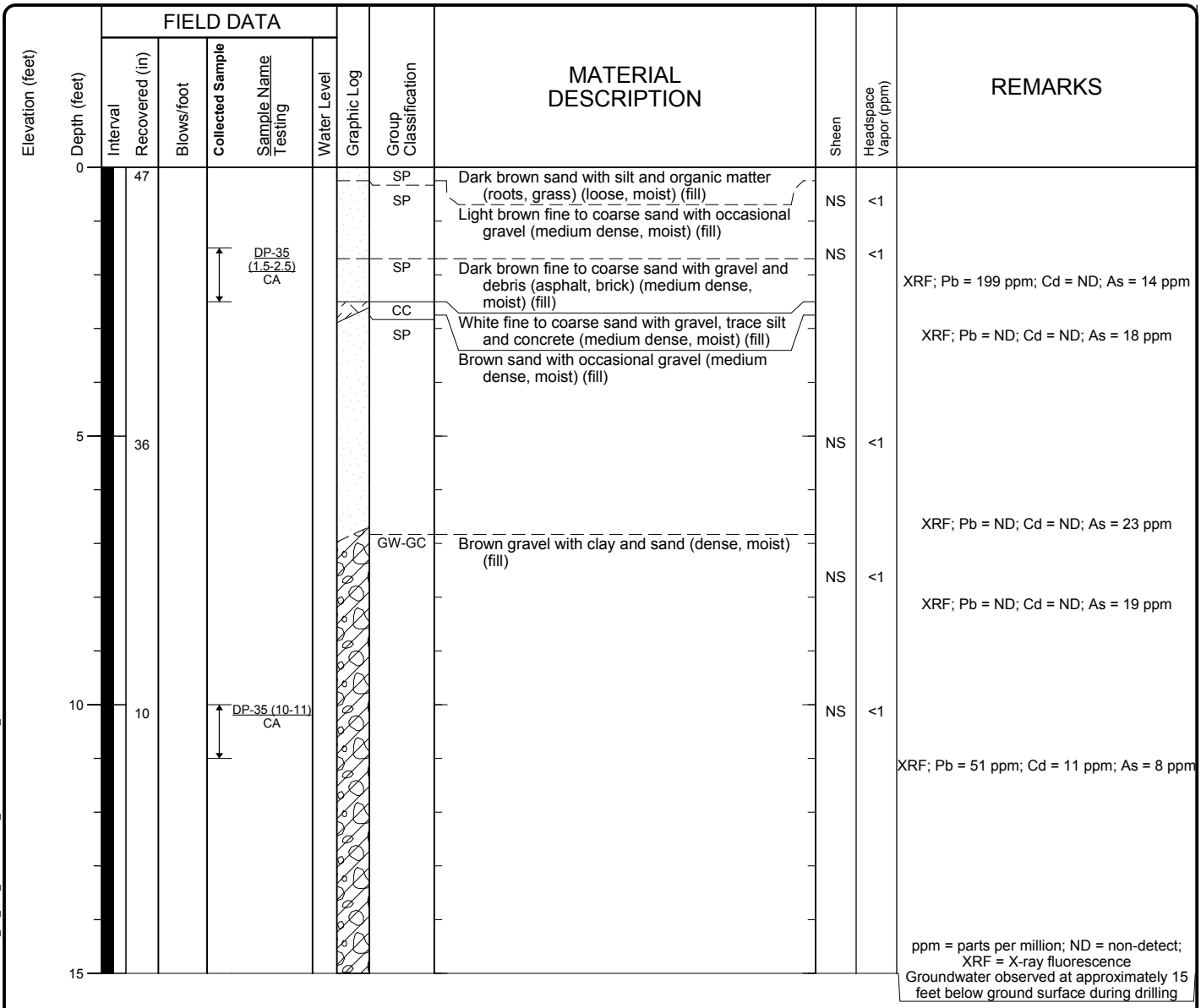
GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-35
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start 9/22/2016 End 9/22/2016	Total Depth (ft) 15	Logged By JML Checked By JRS	Driller Environmental Services Network Northwest	Drilling Method Direct-Push	
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data		Drilling Equipment Geoprobe 7800	
Latitude 47.662072 Longitude -117.420774		System Datum		Groundwater Date Measured / Depth to Water (ft) / Elevation (ft)	
Notes:				See Remarks	



Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-35

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-36
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate\LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
9/22/2016	9/22/2016	15	JML / JRS	Environmental Services Network Northwest	Direct-Push

Surface Elevation (ft) Vertical Datum	Hammer Data	Drilling Equipment
Undetermined		Geoprobe 7800
Latitude 47.66192893 **Longitude** -117.42082928	System Datum	Groundwater: Date Measured / Depth to Water (ft) / Elevation (ft)
Notes:		None Observed

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		34					SP-SM	Dark brown sand with silt and organic matter (roots, grass)			
								SP	Brown fine to coarse sand with gravel and debris (brick) (medium dense, moist) (fill)	NS	<1	
								CC	White gravel with sand and concrete (medium dense, moist)			XRF; Pb = ND; Cd = ND; As = ND
					DP-36 (2-3) CA			SP	Dark brown fine to coarse sand with occasional gravel and debris (asphalt) (dense, moist) (fill)	NS	<1	XRF; Pb = 18 ppm; Cd = ND; As = 8 ppm
	5		34							NS	<1	
								CC	White/gray gravel with sand and concrete (dense, moist) (fill)			
								GP	Brown gravel with sand and debris (brick) (medium dense, moist) (fill)	NS	<1	XRF; Pb = 36 ppm; Cd = ND; As = 15 ppm
	10		24					GP-GC	Brown gravel with clay and sand (medium dense, moist) (fill)	NS	<1	XRF; Pb = 19 ppm; Cd = ND; As = 14 ppm
								GP	Brown gravel with sand (medium dense, moist) (fill)	NS	<1	
	15											ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-36

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-37
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\01101148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled	Start 9/22/2016	End 9/22/2016	Total Depth (ft)	15	Logged By / Checked By	JML / JRS	Driller	Environmental Services Network Northwest	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum	Undetermined				Hammer Data				Drilling Equipment	Geoprobe 7800
Latitude / Longitude	47.66179565 / -117.42077976				System Datum				Groundwater: Date Measured / Depth to Water (ft) / Elevation (ft)	See Remarks
Notes:										

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name / Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		35						ML	Dark brown silt with sand and organic matter (grass, roots) (loose, moist) (fill)			
									SP	Brown fine to coarse sand with gravel (medium dense, moist) (fill)	NS	<1	XRF; Pb = ND ppm; Cd = 35 ppm; As = 28
											NS	<1	XRF; Pb = ND; Cd = ND; As = 24 ppm
	5		17						GP	Dark gray gravel with sand and debris (asphalt, brick) (medium dense, moist) (fill)	NS	<1	XRF; Pb = ND; Cd = ND; As = ND
	10		14			DP-37 (10-11) CA				Grades to brown	NS	<1	XRF; Pb = 42 ppm; Cd = ND; As = ND
													Groundwater observed at approximately 12.5 feet below ground surface during drilling
	15												ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-37

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-38
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled	Start 9/22/2016	End 9/22/2016	Total Depth (ft)	15	Logged By	JML	Checked By	JRS	Driller	Environmental Services Network Northwest	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum	Undetermined				Hammer Data						Drilling Equipment	Geoprobe 7800
Latitude	47.66187466				System Datum						Groundwater	
Longitude	-117.42061749										Date Measured	Depth to Water (ft) / Elevation (ft)
Notes:											See Remarks	

Elevation (feet) / Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
0		36					SP-SM	Brown sand with silt and organic matter (roots, grass) (loose, moist) (fill)	NS	<1	
							SP	Brown fine to medium sand (loose, moist) (fill)			XRF; Pb = ND; Cd = 27 ppm; As = 12 ppm
							SP	Brown sand with gravel and debris (brick, concrete) (medium dense, moist) (fill)			
				DP-38 (2-3) CA					NS	<1	XRF; Pb = 2,962 ppm; Cd = ND; As = ND
5		24									
				DP-38 (6-7) CA					NS	<1	XRF; Pb = 34 ppm; Cd = 12 ppm; As = 9 ppm
10		36					AC	Asphalt	NS	<1	
							CL	Gray clay (medium stiff, moist to wet)			XRF; Pb = 40 ppm; Cd = ND; As = 14 ppm
									NS	<1	XRF; Pb = 14 ppm; Cd = ND; As = ND Groundwater observed at approximately 13 feet below ground surface during drilling
15											ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-38

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-39
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled	Start 9/22/2016	End 9/22/2016	Total Depth (ft)	15	Logged By JML / Checked By JRS	Driller	Environmental Services Network Northwest	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum	Undetermined		Hammer Data			Drilling Equipment	Geoprobe 7800		
Latitude	47.661987		System Datum			Groundwater	Date Measured	Depth to Water (ft)	Elevation (ft)
Longitude	-117.420549							See Remarks	
Notes:									

Elevation (feet)	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0		33						SP	Dark brown sand with silt and organic matter (roots, grass) (loose, moist) (fill)	NS	<1	
									SP	Brown fine to medium sand (loose, moist) (fill)			
									SP	Dark brown sand with gravel and debris (asphalt, concrete) (medium dense, moist) (fill)	NS	<1	
						DP-39 (2-3) CA							XRF; Pb = ND; Cd = ND; As = ND
	5		6						GP	Gray gravel	NS	<1	XRF; Pb = 29 ppm; Cd = 33 ppm; As = ND
	10		6						GP-GC	Brown sandy gravel with clay (medium dense, moist to wet) (fill)	NS	<1	XRF; Pb = 53 ppm; Cd = ND; As = 24 ppm
													Groundwater observed at approximately 13 feet below ground surface during drilling
	15												ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-39

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-40
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

Drilled	Start 9/22/2016	End 9/22/2016	Total Depth (ft)	15	Logged By JML Checked By JRS	Driller	Environmental Services Network Northwest	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum	Undetermined		Hammer Data			Drilling Equipment	Geoprobe 7800		
Latitude Longitude	47.66210554 -117.42044017		System Datum			Groundwater Date Measured	Depth to Water (ft)	Elevation (ft)	
Notes:							See Remarks		

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0								SP-SM	Brown sand with silt and organic matter (roots, grass) (loose, moist) (fill)			
									SP	Brown fine to medium sand (medium dense, moist) (fill)	NS	<1	XRF; Pb = ND; Cd = ND; As = 21 ppm
											NS	<1	XRF; Pb = ND; Cd = 24 ppm; As = 21 ppm
											NS	<1	
	5										NS	<1	
													XRF; Pb = ND; Cd = ND; As = 18 ppm
									GP	Brown sandy gravel with sand and trace silt (medium dense, moist) (fill)	NS	<1	
													XRF; Pb = ND; Cd = ND; As = 11 ppm
											NS	<1	
	10					DP-40 (10.5-11.5) CA					NS	<1	
													XRF; Pb = 71 ppm; Cd = ND; As = 10 ppm
													Groundwater observed at approximately 13.5 feet below ground surface during drilling
	15												ppm = parts per million; ND = non-detect; XRF = X-ray fluorescence

Note: See Figure A-1 for explanation of symbols.

Log of Direct-Push DP-40

GeoEngineers

Project: Riverfront Park
Project Location: Spokane, Washington
Project Number: 0110-148-06

Figure A-41
Sheet 1 of 1

Spokane: Date:10/25/16 Path:P:\0\0110148\GINT\011014806.GPJ DBTemplate/LibTemplate:GEOENGINEERS_DF_STD_US.GDT/GEI8_ENVIRONMENTAL_STANDARD

APPENDIX B
Laboratory Analytical Reports and Data Validation Report

GeoEngineers

523 East Second Avenue, Spokane, Washington 99202, Telephone: 509.363.3125 www.geoengineers.com

Data Validation Report

Project: City of Spokane –Riverfront Park
September 2016 Soil Samples

GEI File No: 00110-148-06

Date: November 3, 2016

This report documents the results of a United States Environmental Protection Agency (EPA)-defined Stage 2A data validation (EPA Document 540-R-08-005; EPA 2009) of analytical data from the analyses of soil samples collected as part of the September 2016 sampling event, and the associated laboratory quality control (QC) samples. The samples were obtained from the Riverfront Park Site located between Spokane Falls Boulevard to the south, Post Street to the west, Division Street to the east, and the Spokane River to the north, at 507 North Howard Street, in Spokane, Washington.

Objective and Quality Control Elements

GeoEngineers, Inc. (GeoEngineers) completed the data validation consistent with the EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2008) and Inorganic Superfund Data Review (EPA 2010) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

- The samples were analyzed using well-defined and acceptable methods that provide reporting limits below applicable regulatory criteria;
- The precision and accuracy of the data are well-defined and sufficient to provide defensible data; and
- The quality assurance/quality control (QA/QC) procedures utilized by the laboratory meet acceptable industry practices and standards.

In accordance with the Quality Assurance Project Plan (QAPP), Appendix A of the Work Plan, Riverfront Park Geotechnical and Environmental Services (GeoEngineers 2016), the data validation included review of the following QC elements:

- Data Package Completeness
- Chain-of-Custody Documentation
- Holding Times and Sample Preservation
- Surrogate Recoveries
- Method Blanks
- Matrix Spikes/Matrix Spike Duplicates
- Laboratory Control Samples/Laboratory Control Sample Duplicates
- Laboratory Duplicates
- Miscellaneous

Validated Sample Delivery Groups

This data validation included review of the sample delivery groups (SDGs) listed below in Table 1.

TABLE 1: SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS

Laboratory SDG	Samples Validated
590-4572-1	DP-1(0.5-1.5):092016, DP-1(3-4):092016, DP-2(0.5-1.5):092016, DP-3(0.5-1.5):092016, DP-4(1-2):092016, DP-5(0.5-1.5):092016, DP-6(1-2):092016, DP-7(1.5-2.5):092016, DP-8(0.5-1.5):092016, DP-9(0-1):092016, DP-10(1.5-2.5):092016, DP-11(1-2):092016, DP-12(1-2):092016, DP-13(0-1):092016, DP-14(1-2):092016, DP-15(0.5-1.5):092016, DP-16(2-3):092016, DP-17(1-2):092116, DP-18(1.5-2.5):092116, DP-19(1.5-2.5):092116, DP-20(1-2):092116, DP-21(1-2):092116, DP-22(2-3):092116, DP-23(1-2):092116, DP-24(1-2):092116, DP-25(1-2):092116, DP-26(1.5-2.5):092116, DP-27(1.5-2.5):092116, DP-28(1-2):092116, DP-29(1.5-2.5):092116, DP-29(10-11):092116, DP-30(1.5-2.5):092116, DP-31(2-3):092216, DP-32(1.5-2.5):092216, DP-33(1-2):092216, DP-34(1.5-2.5):092216, DP-35(1.5-2.5):092216, DP-35(10-11):092216, DP-36(2-3):092216, DP-37(10-11):092216, DP-38(2-3):092216, DP-38(6-7):092216, DP-39(2-3):092216, DP-40(10.5-11.5):092216
590-4572-2	DP-1(0.5-1.5):092016, DP-1(3-4):092016, DP-2(0.5-1.5):092016, DP-3(0.5-1.5):092016, DP-13(0-1):092016, DP-15(0.5-1.5):092016, DP-16(2-3):092016, DP-17(1-2):092116, DP-19(1.5-2.5):092116, DP-20(1-2):092116, DP-21(1-2):092116, DP-22(2-3):092116, DP-23(1-2):092116, DP-25(1-2):092116, DP-33(1-2):092216, DP-35(1.5-2.5):092216, DP-36(2-3):092216, DP-38(2-3):092216

Chemical Analysis Performed

TestAmerica Laboratories, Inc. (TestAmerica), located in Spokane, Washington, performed laboratory analyses on the soil samples using one or more of the following methods:

- Hydrocarbon Identification (NWTPH-HCID) by Method NWTPH-HCID;
- Petroleum Hydrocarbons (NWTPH-Dx) by Method NWTPH-Dx;
- Volatile Organic Compounds (VOCs) by Method SW8260C;
- Polycyclic Aromatic Hydrocarbons (PAHs) by Method SW8270D-SIM;
- Polychlorinated Biphenyls (PCBs) by Method SW8082A;
- Total Metals by Method EPA6010C/7471B; and
- Total Metals Toxicity Characteristic Leaching Procedure (Metals-TCLP) by Method EPA6010C

Data Validation Summary

The results for each of the QC elements are summarized below.

Data Package Completeness

TestAmerica provided the required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and the identified anomalies were discussed in the relevant laboratory case narrative.

Chain-of-Custody Documentation

Chain-of-custody (COC) forms were provided with the laboratory analytical reports. The COCs were accurate and complete when submitted to the laboratory, with the following exception:

SDG 590-4572-2: The laboratory noted that NWTPH-Dx, VOCs, and Metals-TCLP (Lead) analyses were requested by GeoEngineers on 10/5/2016. These analyses were not originally written on the COC.

Holding Times and Sample Preservation

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for each analysis, with the exceptions noted below. The sample cooler arrived at the laboratory within the appropriate temperatures of between two and six degrees Celsius.

SDG 590-4572-2: (NWTPH-Dx) The 14-day holding time for diesel-range and lube oil-range hydrocarbons analysis was exceeded by one to two days (depending on the sample) in Samples DP-1(0.5-1.5):092016, DP-1(3-4):092016, DP-13(0-1):092016, DP-16(2-3):092016, DP-19(1.5-2.5):092116, DP-20(1-2):092116, DP-21(1-2):092116, DP-22(2-3):092116, and DP-23(1-2):092116. The positive results and reporting limits for diesel-range and lube oil-range hydrocarbons were qualified as estimated (J/UJ) in these samples. See Table 2 for qualified analytes.

(VOCs) The 14-day holding time for VOCs analysis was exceeded by five to six days (depending on the sample) in Samples DP-16(2-3):092016 and DP-23(1-2):092116. The positive results and reporting limits for VOC target analytes were qualified as estimated (J/UJ) in these samples. See Table 2 for qualified analytes.

Surrogate Recoveries

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in an environmental sample. Surrogates are used for organic analyses and are added to the samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated following analysis. The surrogate percent recoveries for field samples were within the laboratory control limits, with the following exceptions:

SDG 590-4572-1: (NWTPH-HCID) The percent recovery for surrogate n-Triacontane-d62 was greater than the control limits in Sample DP-23(1-2):092116. The positive results diesel-range and lube oil-range hydrocarbons were qualified as estimated (J) in this sample.

(PAHs) The percent recovery for surrogate p-Terphenyl-d14 was less than the control limits in Sample DP-16(2-3):092016 and greater than the control limits in Samples DP-21(1-2):092116, DP-26(1.5-2.5):092116, DP-35(1.5-2.5):092216, DP-36(2-3):092216 and DP-39(2-3):092216; however, the samples were spiked with two additional surrogates and in each case the percent recoveries were within their respective control limits. No action was required for these outliers.

SDG 590-4572-2: (NWTPH-Dx) The percent recoveries for surrogates o-Terphenyl and n-Triacontane-d62 were greater than the control limits in Sample DP-16(2-3):092016, because of sample dilution (20X). The surrogates are added to the sample when it is extracted. If the sample is diluted 10X or more, recovery of the surrogates is often not possible because it is also diluted below the linear calibration range of the instrument. No action was required for this outlier.

(PCBs) The percent recovery for surrogate tetrachloro-m-xylene was less than the control limit in Sample DP-13(0-1):092016. The reporting limits for PCB target analytes were qualified as estimated (UJ) in this sample.

Method Blanks

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For each sample batch, method blanks for the applicable methods were analyzed at the required frequency. None of the analytes of interest were detected in the method blanks, with the following exceptions:

SDG 590-4572-1: (Total Metals) There were positive results for total barium, total chromium, total lead, and total selenium detected above the method detection limit, but below the reporting limit in the method blank extracted on 9/26/2016 at 08:54. The positive result for total lead was qualified as non-detected (U) in Sample DP-11(1-2):092016. The remaining associated field samples reported results detected at concentrations greater than 10X the concentration in the method blank for total lead; therefore, no qualifications were required.

Additionally, in the 9/26/2016 at 08:54 method blank, the associated field samples reported positive results detected at concentrations greater than 10X the concentration in the method blank for total barium and total chromium; and there were no positive results for total selenium in the associated field samples; therefore, no qualifications were required.

There were positive results for total selenium and total silver detected above the method detection limit, but below the reporting limit in the method blank extracted on 9/26/2016 at 08:56. The positive results for total silver were qualified as non-detected (U) in Samples DP-23(1-2):092116, DP-31(2-3):092216, and DP-32(1.5-2.5):092216. The associated field sample, DP-25(1-2):092116, reported results detected at concentrations greater than 10X the concentration in the method blank for total silver; and the remaining associated field samples reported no positive results for total silver; therefore, no qualifications were required.

Additionally, in the 9/26/2016 at 08:56 method blank, there were no positive results for total selenium in the associated field samples; therefore, no qualifications were required.

There were positive results for total lead and total selenium detected above the method detection limit, but below the reporting limit in the method blank extracted on 9/26/2016 at 08:58. The positive result for total lead was qualified as non-detected (U) in Sample DP-39(2-3):092216. The remaining associated field samples reported results detected at concentrations greater than 10X the concentration in the method blank for total lead; therefore, no qualifications were required.

Additionally, in the 9/26/2016 at 08:58 method blank, there were no positive results for total selenium in the associated field samples; therefore, no qualifications were required.

Matrix Spikes/Matrix Spike Duplicates

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery is calculated. Matrix spike duplicate (MSD) analyses are generally performed for organic analyses as a precision check and analyzed in the same

sequence as a matrix spike. Using the result values from the MS and MSD, the relative percent difference (RPD) is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

One MS/MSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits, with the following exceptions:

SDG 590-4572-1: (PAHs) The laboratory performed an MS/MSD sample set on Sample DP-1(0.5-1.5):092016. The percent recoveries for benzo[a]pyrene, fluoranthene, phenanthrene, and pyrene were outside than the control limits in the MSD extracted on 9/26/2016; however, the percent recoveries for these target analytes were within the control limits in the corresponding MS. No action was required for these outliers.

Additionally, in the same MS/MSD sample set, the RPD values for benzo[a]pyrene, fluoranthene, phenanthrene, and pyrene were greater than the control limit. The positive results for benzo(a)pyrene, fluoranthene, phenanthrene, and pyrene were qualified as estimated (J) in Sample DP-1(0.5-1.5):092016.

(Total Metals) The laboratory performed an MS/MSD sample set on Sample DP-1(0.5-1.5):092016. The percent recoveries and the RPD for total lead were greater than the control limits in the MS/MSD extracted on 9/26/2016 at 08:54. The positive results for total lead were qualified as estimated (J) in Samples DP-1(0.5-1.5):092016 and DP-1(3-4):092016.

Additionally, in the same MS/MSD sample set, the percent recoveries for total silver were less than the control limits. The positive result and reporting limit for total silver were qualified as estimated (J/UJ) in Samples DP-1(0.5-1.5):092016 and DP-1(3-4):092016.

The laboratory performed an MS/MSD sample set on Sample DP-18(1.5-2.5):092116. The percent recovery for total lead was greater than the control limits in the MS and the percent recovery for total barium was less than the control limits in the MSD extracted on 9/26/2016 at 08:56; however, the percent recoveries for these target analytes were within the control limits in the corresponding MSD and MS. No action was required for these outliers.

Additionally, in the same MS/MSD sample set, the RPD for total lead was greater than the control limit. The positive result for total lead was qualified as estimated (J) in Sample DP-18(1.5-2.5):092116.

Laboratory Control Samples/Laboratory Control Sample Duplicates

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for all analyses and the percent recovery and RPD values were within the proper control limits.

Laboratory Duplicates

Internal laboratory duplicate analyses are performed to monitor the precision of the analyses. Two separate aliquots of a sample are analyzed as distinct samples in the laboratory and the RPD between the two results is calculated. Duplicate analyses should be performed once per analytical batch. If one or more of the samples used has a concentration less than five times the reporting limit for that sample, the absolute difference is used instead of the RPD. The RPD control limits are specified in the laboratory documents. Laboratory duplicates were analyzed at the proper frequency and the specified acceptance criteria were met, with the following exceptions:

SDG 590-4572-1: (Total Metals) A laboratory duplicate analysis was performed on Sample DP-1(0.5-1.5):092016. The RPD for total barium was greater than the control limit. The positive results for total barium were qualified as estimated (J) in Samples DP-1(0.5-1.5):092016 and DP-1(3-4):092016.

A laboratory duplicate analysis was performed on Sample DP-18(1.5-2.5):092116. The RPD for total barium was greater than the control limit. The positive result for total barium was qualified as estimated (J) in Sample DP-18(1.5-2.5):092116.

A laboratory duplicate analysis was performed on Sample DP-29(10-11):092116. The RPD for total mercury was greater than the control limit. There were no positive results for total mercury in this sample; therefore no qualification was required. The positive result for total mercury was qualified as estimated (J) in Sample DP-29(1.5-2.5):092116.

Miscellaneous

SDG 590-4572-2: (NWTPH-Dx) The positive result for diesel-range hydrocarbons in Samples DP-13(0-1):092016 and DP-23(1-2):092116 may be influenced by the relative concentration of lube oil-range hydrocarbons in the samples. For this reason, the positive results for diesel-range hydrocarbons were qualified as estimated (J) in these samples, in order to signify a potential high bias.

Overall Assessment

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate, LCS/LCSD, and MS/MSD percent recovery values, with the exceptions noted above. Precision was acceptable, as demonstrated by the LCS/LCSD, MS/MSD, and laboratory duplicate RPD values, with the exceptions noted above.

The data are acceptable for the intended use, with the following qualifications listed below in Table 2.

TABLE 2: SUMMARY OF QUALIFIED SAMPLES

Sample ID	Analyte	Qualifier	Reason
DP-1(0.5-1.5):092016	Benzo(a)pyrene	J	MS/MSD RPD
	Diesel-range hydrocarbons (Dx)	J	Holding Time
	Fluoranthene	J	MS/MSD RPD
	Lube oil-range hydrocarbons (Dx)	J	Holding Time
	Phenanthrene	J	MS/MSD RPD
	Pyrene	J	MS/MSD RPD
	Total barium	J	Laboratory Duplicate
	Total lead	J	MS/MSD Recovery and RPD
	Total silver	J	MS/MSD Recovery

Sample ID	Analyte	Qualifier	Reason
DP-1(3-4):092016	Diesel-range hydrocarbons (Dx) Lube oil-range hydrocarbons (Dx) Total barium Total lead Total silver	J J J J UJ	Holding Time Holding Time Laboratory Duplicate MS/MSD Recovery and RPD MS/MSD Recovery
DP-11(1-2):092016	Total lead	U	Method Blank Contamination
DP-13(0-1):092016	Diesel-range hydrocarbons (Dx) Lube oil-range hydrocarbons (Dx) PCB target analytes	J J UJ	Holding Time/See Miscellaneous Holding Time Surrogate Recovery
DP-16(2-3):092016	Diesel-range hydrocarbons (Dx) Lube oil-range hydrocarbons (Dx) Methylene chloride Other non-detected VOC target analytes	J J J UJ	Holding Time Holding Time Holding Time Holding Time
DP-18(1.5-2.5):092116	Total barium Total lead	J J	Laboratory Duplicate MS/MSD RPD
DP-19(1.5-2.5):092116	Diesel-range hydrocarbons (Dx) Lube oil-range hydrocarbons (Dx)	UJ J	Holding Time Holding Time
DP-20(1-2):092116	Diesel-range hydrocarbons (Dx) Lube oil-range hydrocarbons (Dx)	UJ J	Holding Time Holding Time
DP-21(1-2):092116	Diesel-range hydrocarbons (Dx) Lube oil-range hydrocarbons (Dx)	UJ J	Holding Time Holding Time
DP-22(2-3):092116	Diesel-range hydrocarbons (Dx) Lube oil-range hydrocarbons (Dx)	UJ J	Holding Time Holding Time
DP-23(1-2):092116	Benzene Diesel-range hydrocarbons (Dx) Diesel-range hydrocarbons (HCID) Ethylbenzene Lube oil-range hydrocarbons (Dx) Lube oil-range hydrocarbons (HCID) Methylene chloride m-Xylene & p-Xylene o-Xylene Toluene Other non-detected VOC target analytes Total silver	J J J J J J J J J J UJ U	Holding Time Holding Time/See Miscellaneous Surrogate Recovery Holding Time Holding Time Surrogate Recovery Holding Time Holding Time Holding Time Holding Time Holding Time Method Blank Contamination
DP-29(1.5-2.5):092116	Total mercury	J	Laboratory Duplicate
DP-31(2-3):092216	Total silver	U	Method Blank Contamination
DP-32(1.5-2.5):092216	Total silver	U	Method Blank Contamination
DP-39(2-3):092216	Total lead	U	Method Blank Contamination

References

GeoEngineers, Inc. "Work Plan, Riverfront Park Geotechnical and Environmental Services," prepared for City of Spokane. April 1, 2016.

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: 590-4572-1
Client Project/Site: Riverfront Park (00110-148-06)
Revision: 1

For:
GeoEngineers Inc
523 East Second Ave
Spokane, Washington 99202

Attn: JR Sugalski

Authorized for release by:
11/2/2016 9:49:25 AM

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LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-1

Job ID: 590-4572-1

Laboratory: TestAmerica Spokane

Narrative

Revision
Per the client's request 6010C Metals data was re-evaluated down to the MDL.

Receipt
The samples were received on 9/23/2016 12:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

GC/MS Semi VOA
Method 8270D SIM: The continuing calibration verification (CCV) associated with batch 590-8854 recovered above the upper control limit for 2-Methylnaphthalene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: DP-13(0-1):092016 (590-4572-14), DP-19(1.5-2.5):092116 (590-4572-20), DP-21(1-2):092116 (590-4572-22), DP-22(2-3):092116 (590-4572-23), DP-23(1-2):092116 (590-4572-24), DP-28(1-2):092116 (590-4572-29), DP-30(1.5-2.5):092116 (590-4572-32), DP-32(1.5-2.5):092216 (590-4572-34), DP-35(1.5-2.5):092216 (590-4572-37), DP-36(2-3):092216 (590-4572-39), DP-39(2-3):092216 (590-4572-43) and (CCVIS 590-8854/5).

Method 8270D SIM: The following samples were diluted due to the nature of the sample matrix: DP-20(1-2):092116 (590-4572-21), DP-21(1-2):092116 (590-4572-22), DP-22(2-3):092116 (590-4572-23), DP-23(1-2):092116 (590-4572-24), DP-30(1.5-2.5):092116 (590-4572-32), DP-32(1.5-2.5):092216 (590-4572-34), DP-35(1.5-2.5):092216 (590-4572-37), DP-36(2-3):092216 (590-4572-39) and DP-39(2-3):092216 (590-4572-43). Elevated reporting limits (RLs) are provided.

Method 8270D SIM: Surrogate p-Terphenyl-d14 recovery for the following samples were outside control limits: DP-16(2-3):092016 (590-4572-17), DP-21(1-2):092116 (590-4572-22), DP-35(1.5-2.5):092216 (590-4572-37), DP-36(2-3):092216 (590-4572-39) and DP-39(2-3):092216 (590-4572-43). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method NWTPH-HCID: Surrogate recovery for the following sample was outside control limits: DP-23(1-2):092116 (590-4572-24). Evidence of matrix interference due to high target analytes is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010C: The post digestion spike % recovery for Barium and Lead associated with batch 590-8899 was outside of control limits. Matrix interface was confirmed by sample dilution.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-4572-1	DP-1(0.5-1.5):092016	Solid	09/20/16 08:50	09/23/16 12:10
590-4572-2	DP-1(3-4):092016	Solid	09/20/16 09:00	09/23/16 12:10
590-4572-3	DP-2(0.5-1.5):092016	Solid	09/20/16 09:20	09/23/16 12:10
590-4572-4	DP-3(0.5-1.5):092016	Solid	09/20/16 09:50	09/23/16 12:10
590-4572-5	DP-4(1-2):092016	Solid	09/20/16 10:30	09/23/16 12:10
590-4572-6	DP-5(0.5-1.5):092016	Solid	09/20/16 10:50	09/23/16 12:10
590-4572-7	DP-6(1-2):092016	Solid	09/20/16 11:10	09/23/16 12:10
590-4572-8	DP-7(1.5-2.5):092016	Solid	09/20/16 11:25	09/23/16 12:10
590-4572-9	DP-8(0.5-1.5):092016	Solid	09/20/16 11:45	09/23/16 12:10
590-4572-10	DP-9(0-1):092016	Solid	09/20/16 12:05	09/23/16 12:10
590-4572-11	DP-10(1.5-2.5):092016	Solid	09/20/16 13:45	09/23/16 12:10
590-4572-12	DP-11(1-2):092016	Solid	09/20/16 14:00	09/23/16 12:10
590-4572-13	DP-12(1-2):092016	Solid	09/20/16 14:20	09/23/16 12:10
590-4572-14	DP-13(0-1):092016	Solid	09/20/16 14:40	09/23/16 12:10
590-4572-15	DP-14(1-2):092016	Solid	09/20/16 15:15	09/23/16 12:10
590-4572-16	DP-15(0.5-1.5):092016	Solid	09/20/16 15:30	09/23/16 12:10
590-4572-17	DP-16(2-3):092016	Solid	09/20/16 15:50	09/23/16 12:10
590-4572-18	DP-17(1-2):092116	Solid	09/21/16 09:05	09/23/16 12:10
590-4572-19	DP-18(1.5-2.5):092116	Solid	09/21/16 10:00	09/23/16 12:10
590-4572-20	DP-19(1.5-2.5):092116	Solid	09/21/16 10:20	09/23/16 12:10
590-4572-21	DP-20(1-2):092116	Solid	09/21/16 10:40	09/23/16 12:10
590-4572-22	DP-21(1-2):092116	Solid	09/21/16 11:00	09/23/16 12:10
590-4572-23	DP-22(2-3):092116	Solid	09/21/16 11:40	09/23/16 12:10
590-4572-24	DP-23(1-2):092116	Solid	09/21/16 12:15	09/23/16 12:10
590-4572-25	DP-24(1-2):092116	Solid	09/21/16 12:30	09/23/16 12:10
590-4572-26	DP-25(1-2):092116	Solid	09/21/16 13:00	09/23/16 12:10
590-4572-27	DP-26(1.5-2.5):092116	Solid	09/21/16 14:40	09/23/16 12:10
590-4572-28	DP-27(1.5-2.5):092116	Solid	09/21/16 15:00	09/23/16 12:10
590-4572-29	DP-28(1-2):092116	Solid	09/21/16 15:40	09/23/16 12:10
590-4572-30	DP-29(1.5-2.5):092116	Solid	09/21/16 16:05	09/23/16 12:10
590-4572-31	DP-29(10-11):092116	Solid	09/21/16 16:10	09/23/16 12:10
590-4572-32	DP-30(1.5-2.5):092116	Solid	09/21/16 16:30	09/23/16 12:10
590-4572-33	DP-31(2-3):092216	Solid	09/22/16 08:30	09/23/16 12:10
590-4572-34	DP-32(1.5-2.5):092216	Solid	09/22/16 09:30	09/23/16 12:10
590-4572-35	DP-33(1-2):092216	Solid	09/22/16 09:55	09/23/16 12:10
590-4572-36	DP-34(1.5-2.5):092216	Solid	09/22/16 10:00	09/23/16 12:10
590-4572-37	DP-35(1.5-2.5):092216	Solid	09/22/16 11:20	09/23/16 12:10
590-4572-38	DP-35(10-11):092216	Solid	09/22/16 11:25	09/23/16 12:10
590-4572-39	DP-36(2-3):092216	Solid	09/22/16 11:50	09/23/16 12:10
590-4572-40	DP-37(10-11):092216	Solid	09/22/16 12:00	09/23/16 12:10
590-4572-41	DP-38(2-3):092216	Solid	09/22/16 13:25	09/23/16 12:10
590-4572-42	DP-38(6-7):092216	Solid	09/22/16 13:30	09/23/16 12:10
590-4572-43	DP-39(2-3):092216	Solid	09/22/16 13:45	09/23/16 12:10
590-4572-44	DP-40(10.5-11.5):092216	Solid	09/22/16 14:10	09/23/16 12:10

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample ID: DP-1(0.5-1.5):092016
Date Collected: 09/20/16 08:50
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-1
Matrix: Solid
Percent Solids: 91.6

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	140		27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
2-Methylnaphthalene	350		27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
1-Methylnaphthalene	330		27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
Acenaphthylene	ND		27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
Acenaphthene	ND		27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
Fluorene	39		27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
Phenanthrene	280	F1 F2	27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
Anthracene	30		27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
Fluoranthene	140	F1 F2	27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
Pyrene	180	F1 F2	27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
Benzo[a]anthracene	82		27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
Chrysene	140		27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
Benzo[b]fluoranthene	130		27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
Benzo[k]fluoranthene	36		27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
Benzo[a]pyrene	84	F1 F2	27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
Indeno[1,2,3-cd]pyrene	56		27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
Dibenz(a,h)anthracene	ND		27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1
Benzo[g,h,i]perylene	70		27		ug/Kg	☼	09/26/16 13:14	09/27/16 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*99*		*23 - 120*	*09/26/16 13:14*	*09/27/16 18:12*	*1*
2-Fluorobiphenyl (Surr)	*111*		*38 - 123*	*09/26/16 13:14*	*09/27/16 18:12*	*1*
p-Terphenyl-d14	*111*		*68 - 136*	*09/26/16 13:14*	*09/27/16 18:12*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		43		mg/Kg	☼	09/26/16 08:40	09/26/16 14:58	1
Diesel Range Organics (DRO) (C10-C25)	2800		110		mg/Kg	☼	09/26/16 08:40	09/26/16 14:58	1
Residual Range Organics (RRO) (C25-C36)	4400		110		mg/Kg	☼	09/26/16 08:40	09/26/16 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*110*		*50 - 150*	*09/26/16 08:40*	*09/26/16 14:58*	*1*
n-Triacontane-d62	*116*		*50 - 150*	*09/26/16 08:40*	*09/26/16 14:58*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.2	J	6.8	2.4	mg/Kg	☼	09/26/16 08:54	09/29/16 16:06	5
Barium	190	B	3.4	0.29	mg/Kg	☼	09/26/16 08:54	09/29/16 16:06	5
Cadmium	1.7	J	3.4	0.19	mg/Kg	☼	09/26/16 08:54	09/29/16 16:06	5
Chromium	3.9	B	3.4	0.31	mg/Kg	☼	09/26/16 08:54	09/29/16 16:06	5
Lead	210	B F1 F2	6.8	1.9	mg/Kg	☼	09/26/16 08:54	09/29/16 16:06	5
Selenium	ND		16	5.6	mg/Kg	☼	09/26/16 08:54	09/29/16 16:06	5
Silver	0.48	J F1	3.4	0.29	mg/Kg	☼	09/26/16 08:54	09/29/16 16:06	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	73		50		ug/Kg	☼	09/29/16 09:11	09/30/16 11:53	1

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-1

Client Sample ID: DP-1(3-4):092016
Date Collected: 09/20/16 09:00
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-2
Matrix: Solid
Percent Solids: 93.6

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		11		ug/Kg	☼	09/26/16 13:14	09/27/16 22:22	1
2-Methylnaphthalene	ND		11		ug/Kg	☼	09/26/16 13:14	09/27/16 22:22	1
1-Methylnaphthalene	ND		11		ug/Kg	☼	09/26/16 13:14	09/27/16 22:22	1
Acenaphthylene	ND		11		ug/Kg	☼	09/26/16 13:14	09/27/16 22:22	1
Acenaphthene	ND		11		ug/Kg	☼	09/26/16 13:14	09/27/16 22:22	1
Fluorene	**23**		11		ug/Kg	☼	09/26/16 13:14	09/27/16 22:22	1
Phenanthrene	**31**		11		ug/Kg	☼	09/26/16 13:14	09/27/16 22:22	1
Anthracene	**20**		11		ug/Kg	☼	09/26/16 13:14	09/27/16 22:22	1
Fluoranthene	**18**		11		ug/Kg	☼	09/26/16 13:14	09/27/16 22:22	1
Pyrene	**74**		53		ug/Kg	☼	09/26/16 13:14	09/27/16 18:35	5
Benzo[a]anthracene	ND		53		ug/Kg	☼	09/26/16 13:14	09/27/16 18:35	5
Chrysene	ND		53		ug/Kg	☼	09/26/16 13:14	09/27/16 18:35	5
Benzo[b]fluoranthene	ND		53		ug/Kg	☼	09/26/16 13:14	09/27/16 18:35	5
Benzo[k]fluoranthene	ND		53		ug/Kg	☼	09/26/16 13:14	09/27/16 18:35	5
Benzo[a]pyrene	ND		53		ug/Kg	☼	09/26/16 13:14	09/27/16 18:35	5
Indeno[1,2,3-cd]pyrene	ND		53		ug/Kg	☼	09/26/16 13:14	09/27/16 18:35	5
Dibenz(a,h)anthracene	ND		53		ug/Kg	☼	09/26/16 13:14	09/27/16 18:35	5
Benzo[g,h,i]perylene	ND		53		ug/Kg	☼	09/26/16 13:14	09/27/16 18:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*84*		*23 - 120*	*09/26/16 13:14*	*09/27/16 18:35*	*5*
Nitrobenzene-d5	*85*		*23 - 120*	*09/26/16 13:14*	*09/27/16 22:22*	*1*
2-Fluorobiphenyl (Surr)	*87*		*38 - 123*	*09/26/16 13:14*	*09/27/16 18:35*	*5*
2-Fluorobiphenyl (Surr)	*107*		*38 - 123*	*09/26/16 13:14*	*09/27/16 22:22*	*1*
p-Terphenyl-d14	*115*		*68 - 136*	*09/26/16 13:14*	*09/27/16 18:35*	*5*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		41		mg/Kg	☼	09/26/16 08:40	09/26/16 15:36	1
Diesel Range Organics (DRO) (C10-C25)	**7400**		100		mg/Kg	☼	09/26/16 08:40	09/26/16 15:36	1
Residual Range Organics (RRO) (C25-C36)	**9900**		100		mg/Kg	☼	09/26/16 08:40	09/26/16 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*111*		*50 - 150*	*09/26/16 08:40*	*09/26/16 15:36*	*1*
n-Triacontane-d62	*105*		*50 - 150*	*09/26/16 08:40*	*09/26/16 15:36*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		6.7	2.4	mg/Kg	☼	09/26/16 08:54	09/29/16 16:17	5
Barium	**42**	**B**	3.3	0.28	mg/Kg	☼	09/26/16 08:54	09/29/16 16:17	5
Cadmium	ND		3.3	0.19	mg/Kg	☼	09/26/16 08:54	09/29/16 16:17	5
Chromium	**2.3**	**J B**	3.3	0.30	mg/Kg	☼	09/26/16 08:54	09/29/16 16:17	5
Lead	**12**	**B**	6.7	1.8	mg/Kg	☼	09/26/16 08:54	09/29/16 16:17	5
Selenium	ND		16	5.5	mg/Kg	☼	09/26/16 08:54	09/29/16 16:17	5
Silver	ND		3.3	0.28	mg/Kg	☼	09/26/16 08:54	09/29/16 16:17	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		48		ug/Kg	☼	09/29/16 09:11	09/30/16 11:55	1

Client Sample ID: DP-2(0.5-1.5):092016

Date Collected: 09/20/16 09:20
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-3

Matrix: Solid
Percent Solids: 78.4

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**200**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
2-Methylnaphthalene	**330**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
1-Methylnaphthalene	**250**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
Acenaphthylene	**120**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
Acenaphthene	ND		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
Fluorene	ND		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
Phenanthrene	**480**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
Anthracene	**170**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
Fluoranthene	**270**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
Pyrene	**240**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
Benzo[a]anthracene	**140**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
Chrysene	**210**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
Benzo[b]fluoranthene	**380**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
Benzo[k]fluoranthene	**74**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
Benzo[a]pyrene	**130**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
Indeno[1,2,3-cd]pyrene	**140**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
Dibenz(a,h)anthracene	**51**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1
Benzo[g,h,i]perylene	**260**		32		ug/Kg	☼	09/26/16 13:14	09/27/16 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*95*		*23 - 120*	*09/26/16 13:14*	*09/27/16 18:58*	*1*
2-Fluorobiphenyl (Surr)	*101*		*38 - 123*	*09/26/16 13:14*	*09/27/16 18:58*	*1*
p-Terphenyl-d14	*118*		*68 - 136*	*09/26/16 13:14*	*09/27/16 18:58*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		50		mg/Kg	☼	09/26/16 08:40	09/26/16 15:55	1
Diesel Range Organics (DRO) (C10-C25)	ND		130		mg/Kg	☼	09/26/16 08:40	09/26/16 15:55	1
Residual Range Organics (RRO) (C25-C36)	**490**		130		mg/Kg	☼	09/26/16 08:40	09/26/16 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*96*		*50 - 150*	*09/26/16 08:40*	*09/26/16 15:55*	*1*
n-Triacontane-d62	*113*		*50 - 150*	*09/26/16 08:40*	*09/26/16 15:55*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		8.0	2.8	mg/Kg	☼	09/26/16 08:54	09/29/16 16:20	5
Barium	**370**	**B**	4.0	0.34	mg/Kg	☼	09/26/16 08:54	09/29/16 16:20	5
Cadmium	**2.7**	**J**	4.0	0.22	mg/Kg	☼	09/26/16 08:54	09/29/16 16:20	5
Chromium	**4.1**	**B**	4.0	0.36	mg/Kg	☼	09/26/16 08:54	09/29/16 16:20	5
Lead	**140**	**B**	8.0	2.2	mg/Kg	☼	09/26/16 08:54	09/29/16 16:20	5
Selenium	ND		19	6.6	mg/Kg	☼	09/26/16 08:54	09/29/16 16:20	5
Silver	**0.36**	**J**	4.0	0.34	mg/Kg	☼	09/26/16 08:54	09/29/16 16:20	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**170**		50		ug/Kg	☼	09/29/16 09:11	09/30/16 11:57	1

Client Sample ID: DP-3(0.5-1.5):092016
Date Collected: 09/20/16 09:50
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-4
Matrix: Solid
Percent Solids: 95.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	43		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
2-Methylnaphthalene	50		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
1-Methylnaphthalene	47		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
Acenaphthylene	51		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
Acenaphthene	50		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
Fluorene	ND		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
Phenanthrene	480		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
Anthracene	190		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
Fluoranthene	1000		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
Pyrene	1100		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
Benzo[a]anthracene	650		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
Chrysene	760		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
Benzo[b]fluoranthene	1000		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
Benzo[k]fluoranthene	380		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
Benzo[a]pyrene	760		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
Indeno[1,2,3-cd]pyrene	330		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
Dibenz(a,h)anthracene	100		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1
Benzo[g,h,i]perylene	370		39		ug/Kg	☼	09/26/16 13:14	09/27/16 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*23 - 120*	*09/26/16 13:14*	*09/27/16 19:20*	*1*
2-Fluorobiphenyl (Surr)	*108*		*38 - 123*	*09/26/16 13:14*	*09/27/16 19:20*	*1*
p-Terphenyl-d14	*123*		*68 - 136*	*09/26/16 13:14*	*09/27/16 19:20*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		40		mg/Kg	☼	09/26/16 08:40	09/26/16 16:14	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg	☼	09/26/16 08:40	09/26/16 16:14	1
Residual Range Organics (RRO) (C25-C36)	380		100		mg/Kg	☼	09/26/16 08:40	09/26/16 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*94*		*50 - 150*	*09/26/16 08:40*	*09/26/16 16:14*	*1*
n-Triacontane-d62	*105*		*50 - 150*	*09/26/16 08:40*	*09/26/16 16:14*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.7		6.2	2.2	mg/Kg	☼	09/26/16 08:54	09/29/16 16:22	5
Barium	120	B	3.1	0.26	mg/Kg	☼	09/26/16 08:54	09/29/16 16:22	5
Cadmium	2.4	J	3.1	0.17	mg/Kg	☼	09/26/16 08:54	09/29/16 16:22	5
Chromium	35	B	3.1	0.28	mg/Kg	☼	09/26/16 08:54	09/29/16 16:22	5
Lead	390	B	6.2	1.7	mg/Kg	☼	09/26/16 08:54	09/29/16 16:22	5
Selenium	ND		15	5.1	mg/Kg	☼	09/26/16 08:54	09/29/16 16:22	5
Silver	1.6	J	3.1	0.26	mg/Kg	☼	09/26/16 08:54	09/29/16 16:22	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	720		49		ug/Kg	☼	09/29/16 09:11	09/30/16 12:00	1

Client Sample ID: DP-4(1-2):092016
Date Collected: 09/20/16 10:30
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-5
Matrix: Solid
Percent Solids: 97.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
2-Methylnaphthalene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
1-Methylnaphthalene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
Acenaphthylene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
Acenaphthene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
Fluorene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
Phenanthrene	**36**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
Anthracene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
Fluoranthene	**46**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
Pyrene	**54**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
Benzo[a]anthracene	**23**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
Chrysene	**25**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
Benzo[b]fluoranthene	**32**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
Benzo[k]fluoranthene	**12**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
Benzo[a]pyrene	**25**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
Indeno[1,2,3-cd]pyrene	**12**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
Dibenz(a,h)anthracene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1
Benzo[g,h,i]perylene	**13**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*89*		*23 - 120*	*09/26/16 13:14*	*09/27/16 19:43*	*1*
2-Fluorobiphenyl (Surr)	*96*		*38 - 123*	*09/26/16 13:14*	*09/27/16 19:43*	*1*
p-Terphenyl-d14	*111*		*68 - 136*	*09/26/16 13:14*	*09/27/16 19:43*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		40		mg/Kg	☼	09/26/16 08:40	09/26/16 16:33	1
Diesel Range Organics (DRO) (C10-C25)	ND		99		mg/Kg	☼	09/26/16 08:40	09/26/16 16:33	1
Residual Range Organics (RRO) (C25-C36)	ND		99		mg/Kg	☼	09/26/16 08:40	09/26/16 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*95*		*50 - 150*	*09/26/16 08:40*	*09/26/16 16:33*	*1*
n-Triacontane-d62	*105*		*50 - 150*	*09/26/16 08:40*	*09/26/16 16:33*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.9**		6.3	2.2	mg/Kg	☼	09/26/16 08:54	09/29/16 16:33	5
Barium	**50**	**B**	3.1	0.27	mg/Kg	☼	09/26/16 08:54	09/29/16 16:33	5
Cadmium	**0.24**	**J**	3.1	0.18	mg/Kg	☼	09/26/16 08:54	09/29/16 16:33	5
Chromium	**8.6**	**B**	3.1	0.29	mg/Kg	☼	09/26/16 08:54	09/29/16 16:33	5
Lead	**51**	**B**	6.3	1.7	mg/Kg	☼	09/26/16 08:54	09/29/16 16:33	5
Selenium	ND		15	5.2	mg/Kg	☼	09/26/16 08:54	09/29/16 16:33	5
Silver	**0.43**	**J**	3.1	0.27	mg/Kg	☼	09/26/16 08:54	09/29/16 16:33	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**110**		49		ug/Kg	☼	09/29/16 09:11	09/30/16 12:06	1

Client Sample ID: DP-5(0.5-1.5):092016
Date Collected: 09/20/16 10:50
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-6
Matrix: Solid
Percent Solids: 92.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	56		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
2-Methylnaphthalene	130		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
1-Methylnaphthalene	100		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
Acenaphthylene	12		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
Acenaphthene	12		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
Fluorene	11		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
Phenanthrene	180		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
Anthracene	29		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
Fluoranthene	150		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
Pyrene	140		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
Benzo[a]anthracene	71		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
Chrysene	110		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
Benzo[b]fluoranthene	130		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
Benzo[k]fluoranthene	31		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
Benzo[a]pyrene	76		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
Indeno[1,2,3-cd]pyrene	46		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
Dibenz(a,h)anthracene	13		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1
Benzo[g,h,i]perylene	47		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*88*		*23 - 120*	*09/26/16 13:14*	*09/27/16 20:06*	*1*
2-Fluorobiphenyl (Surr)	*101*		*38 - 123*	*09/26/16 13:14*	*09/27/16 20:06*	*1*
p-Terphenyl-d14	*117*		*68 - 136*	*09/26/16 13:14*	*09/27/16 20:06*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		42		mg/Kg	☼	09/26/16 08:40	09/26/16 16:51	1
Diesel Range Organics (DRO) (C10-C25)	190		110		mg/Kg	☼	09/26/16 08:40	09/26/16 16:51	1
Residual Range Organics (RRO) (C25-C36)	480		110		mg/Kg	☼	09/26/16 08:40	09/26/16 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*99*		*50 - 150*	*09/26/16 08:40*	*09/26/16 16:51*	*1*
n-Triacontane-d62	*111*		*50 - 150*	*09/26/16 08:40*	*09/26/16 16:51*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.1	J	6.7	2.4	mg/Kg	☼	09/26/16 08:54	09/29/16 16:35	5
Barium	180	B	3.4	0.29	mg/Kg	☼	09/26/16 08:54	09/29/16 16:35	5
Cadmium	1.5	J	3.4	0.19	mg/Kg	☼	09/26/16 08:54	09/29/16 16:35	5
Chromium	5.9	B	3.4	0.31	mg/Kg	☼	09/26/16 08:54	09/29/16 16:35	5
Lead	210	B	6.7	1.9	mg/Kg	☼	09/26/16 08:54	09/29/16 16:35	5
Selenium	ND		16	5.5	mg/Kg	☼	09/26/16 08:54	09/29/16 16:35	5
Silver	0.73	J	3.4	0.29	mg/Kg	☼	09/26/16 08:54	09/29/16 16:35	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	280		49		ug/Kg	☼	09/29/16 09:11	09/30/16 12:09	1

Client Sample ID: DP-6(1-2):092016
Date Collected: 09/20/16 11:10
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-7
Matrix: Solid
Percent Solids: 88.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	180		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
2-Methylnaphthalene	160		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
1-Methylnaphthalene	110		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
Acenaphthylene	22		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
Acenaphthene	ND		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
Fluorene	ND		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
Phenanthrene	160		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
Anthracene	37		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
Fluoranthene	110		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
Pyrene	110		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
Benzo[a]anthracene	58		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
Chrysene	96		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
Benzo[b]fluoranthene	130		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
Benzo[k]fluoranthene	35		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
Benzo[a]pyrene	66		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
Indeno[1,2,3-cd]pyrene	46		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
Dibenz(a,h)anthracene	20		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1
Benzo[g,h,i]perylene	62		11		ug/Kg	☼	09/26/16 13:14	09/27/16 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*68*		*23 - 120*	*09/26/16 13:14*	*09/27/16 20:28*	*1*
2-Fluorobiphenyl (Surr)	*77*		*38 - 123*	*09/26/16 13:14*	*09/27/16 20:28*	*1*
p-Terphenyl-d14	*79*		*68 - 136*	*09/26/16 13:14*	*09/27/16 20:28*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		44		mg/Kg	☼	09/26/16 08:40	09/26/16 17:10	1
Diesel Range Organics (DRO) (C10-C25)	ND		110		mg/Kg	☼	09/26/16 08:40	09/26/16 17:10	1
Residual Range Organics (RRO) (C25-C36)	170		110		mg/Kg	☼	09/26/16 08:40	09/26/16 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*101*		*50 - 150*	*09/26/16 08:40*	*09/26/16 17:10*	*1*
n-Triacontane-d62	*114*		*50 - 150*	*09/26/16 08:40*	*09/26/16 17:10*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.3	J	6.8	2.4	mg/Kg	☼	09/26/16 08:54	09/29/16 16:37	5
Barium	370	B	3.4	0.29	mg/Kg	☼	09/26/16 08:54	09/29/16 16:37	5
Cadmium	2.2	J	3.4	0.19	mg/Kg	☼	09/26/16 08:54	09/29/16 16:37	5
Chromium	5.3	B	3.4	0.31	mg/Kg	☼	09/26/16 08:54	09/29/16 16:37	5
Lead	420	B	6.8	1.9	mg/Kg	☼	09/26/16 08:54	09/29/16 16:37	5
Selenium	ND		16	5.6	mg/Kg	☼	09/26/16 08:54	09/29/16 16:37	5
Silver	0.99	J	3.4	0.29	mg/Kg	☼	09/26/16 08:54	09/29/16 16:37	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	120		48		ug/Kg	☼	09/29/16 09:11	09/30/16 12:11	1

Client Sample ID: DP-7(1.5-2.5):092016
Date Collected: 09/20/16 11:25
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-8
Matrix: Solid
Percent Solids: 93.6

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
2-Methylnaphthalene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
1-Methylnaphthalene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
Acenaphthylene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
Acenaphthene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
Fluorene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
Phenanthrene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
Anthracene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
Fluoranthene	**18**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
Pyrene	**25**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
Benzo[a]anthracene	**12**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
Chrysene	**16**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
Benzo[b]fluoranthene	**21**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
Benzo[k]fluoranthene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
Benzo[a]pyrene	**16**		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
Indeno[1,2,3-cd]pyrene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
Dibenz(a,h)anthracene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1
Benzo[g,h,i]perylene	ND		10		ug/Kg	☼	09/26/16 13:14	09/27/16 20:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*87*		*23 - 120*	*09/26/16 13:14*	*09/27/16 20:51*	*1*
2-Fluorobiphenyl (Surr)	*93*		*38 - 123*	*09/26/16 13:14*	*09/27/16 20:51*	*1*
p-Terphenyl-d14	*126*		*68 - 136*	*09/26/16 13:14*	*09/27/16 20:51*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		40		mg/Kg	☼	09/26/16 08:40	09/26/16 17:28	1
Diesel Range Organics (DRO) (C10-C25)	ND		99		mg/Kg	☼	09/26/16 08:40	09/26/16 17:28	1
Residual Range Organics (RRO) (C25-C36)	ND		99		mg/Kg	☼	09/26/16 08:40	09/26/16 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*50 - 150*	*09/26/16 08:40*	*09/26/16 17:28*	*1*
n-Triacontane-d62	*107*		*50 - 150*	*09/26/16 08:40*	*09/26/16 17:28*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		6.6	2.3	mg/Kg	☼	09/26/16 08:54	09/29/16 16:40	5
Barium	**49**	**B**	3.3	0.28	mg/Kg	☼	09/26/16 08:54	09/29/16 16:40	5
Cadmium	ND		3.3	0.19	mg/Kg	☼	09/26/16 08:54	09/29/16 16:40	5
Chromium	**1.2**	**J B**	3.3	0.30	mg/Kg	☼	09/26/16 08:54	09/29/16 16:40	5
Lead	**15**	**B**	6.6	1.8	mg/Kg	☼	09/26/16 08:54	09/29/16 16:40	5
Selenium	ND		16	5.4	mg/Kg	☼	09/26/16 08:54	09/29/16 16:40	5
Silver	ND		3.3	0.28	mg/Kg	☼	09/26/16 08:54	09/29/16 16:40	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**400**		46		ug/Kg	☼	09/29/16 09:11	09/30/16 12:13	1

Client Sample ID: DP-8(0.5-1.5):092016

Date Collected: 09/20/16 11:45
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-9

Matrix: Solid
Percent Solids: 93.9

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**26**		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
2-Methylnaphthalene	**41**		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
1-Methylnaphthalene	**34**		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
Acenaphthylene	ND		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
Acenaphthene	ND		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
Fluorene	ND		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
Phenanthrene	**47**		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
Anthracene	ND		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
Fluoranthene	**48**		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
Pyrene	**50**		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
Benzo[a]anthracene	**28**		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
Chrysene	**47**		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
Benzo[b]fluoranthene	**65**		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
Benzo[k]fluoranthene	ND		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
Benzo[a]pyrene	**34**		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
Indeno[1,2,3-cd]pyrene	ND		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
Dibenz(a,h)anthracene	ND		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1
Benzo[g,h,i]perylene	**26**		26		ug/Kg	☼	09/26/16 13:14	09/27/16 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*93*		*23 - 120*	*09/26/16 13:14*	*09/27/16 21:14*	*1*
2-Fluorobiphenyl (Surr)	*115*		*38 - 123*	*09/26/16 13:14*	*09/27/16 21:14*	*1*
p-Terphenyl-d14	*118*		*68 - 136*	*09/26/16 13:14*	*09/27/16 21:14*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		40		mg/Kg	☼	09/26/16 08:40	09/26/16 17:46	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg	☼	09/26/16 08:40	09/26/16 17:46	1
Residual Range Organics (RRO) (C25-C36)	**430**		100		mg/Kg	☼	09/26/16 08:40	09/26/16 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*98*		*50 - 150*	*09/26/16 08:40*	*09/26/16 17:46*	*1*
n-Triacontane-d62	*105*		*50 - 150*	*09/26/16 08:40*	*09/26/16 17:46*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.1**		6.5	2.3	mg/Kg	☼	09/26/16 08:54	09/29/16 16:42	5
Barium	**66**	**B**	3.2	0.27	mg/Kg	☼	09/26/16 08:54	09/29/16 16:42	5
Cadmium	**0.24**	**J**	3.2	0.18	mg/Kg	☼	09/26/16 08:54	09/29/16 16:42	5
Chromium	**6.8**	**B**	3.2	0.29	mg/Kg	☼	09/26/16 08:54	09/29/16 16:42	5
Lead	**62**	**B**	6.5	1.8	mg/Kg	☼	09/26/16 08:54	09/29/16 16:42	5
Selenium	ND		16	5.3	mg/Kg	☼	09/26/16 08:54	09/29/16 16:42	5
Silver	**0.29**	**J**	3.2	0.27	mg/Kg	☼	09/26/16 08:54	09/29/16 16:42	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		48		ug/Kg	☼	09/29/16 09:11	09/30/16 12:16	1

Client Sample ID: DP-9(0-1):092016
Date Collected: 09/20/16 12:05
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-10
Matrix: Solid
Percent Solids: 90.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	21		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
2-Methylnaphthalene	33		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
1-Methylnaphthalene	26		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
Acenaphthylene	21		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
Acenaphthene	ND		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
Fluorene	ND		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
Phenanthrene	20		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
Anthracene	19		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
Fluoranthene	23		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
Pyrene	28		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
Benzo[a]anthracene	34		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
Chrysene	170		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
Benzo[b]fluoranthene	34		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
Benzo[k]fluoranthene	19		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
Benzo[a]pyrene	39		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
Indeno[1,2,3-cd]pyrene	65		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
Dibenz(a,h)anthracene	18		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1
Benzo[g,h,i]perylene	120		11		ug/Kg	☼	09/27/16 14:30	09/28/16 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*70*		*23 - 120*	*09/27/16 14:30*	*09/28/16 13:43*	*1*
2-Fluorobiphenyl (Surr)	*87*		*38 - 123*	*09/27/16 14:30*	*09/28/16 13:43*	*1*
p-Terphenyl-d14	*96*		*68 - 136*	*09/27/16 14:30*	*09/28/16 13:43*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		42		mg/Kg	☼	09/26/16 08:40	09/26/16 18:04	1
Diesel Range Organics (DRO) (C10-C25)	ND		110		mg/Kg	☼	09/26/16 08:40	09/26/16 18:04	1
Residual Range Organics (RRO) (C25-C36)	ND		110		mg/Kg	☼	09/26/16 08:40	09/26/16 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*107*		*50 - 150*	*09/26/16 08:40*	*09/26/16 18:04*	*1*
n-Triacontane-d62	*119*		*50 - 150*	*09/26/16 08:40*	*09/26/16 18:04*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.0	J	6.9	2.4	mg/Kg	☼	09/26/16 08:54	09/29/16 16:44	5
Barium	100	B	3.4	0.29	mg/Kg	☼	09/26/16 08:54	09/29/16 16:44	5
Cadmium	ND		3.4	0.19	mg/Kg	☼	09/26/16 08:54	09/29/16 16:44	5
Chromium	9.9	B	3.4	0.31	mg/Kg	☼	09/26/16 08:54	09/29/16 16:44	5
Lead	8.8	B	6.9	1.9	mg/Kg	☼	09/26/16 08:54	09/29/16 16:44	5
Selenium	ND		16	5.6	mg/Kg	☼	09/26/16 08:54	09/29/16 16:44	5
Silver	ND		3.4	0.29	mg/Kg	☼	09/26/16 08:54	09/29/16 16:44	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	160		49		ug/Kg	☼	09/29/16 09:11	09/30/16 12:18	1

Client Sample ID: DP-10(1.5-2.5):092016
Date Collected: 09/20/16 13:45
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-11
Matrix: Solid
Percent Solids: 89.4

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
2-Methylnaphthalene	ND		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
1-Methylnaphthalene	ND		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
Acenaphthylene	ND		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
Acenaphthene	ND		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
Fluorene	ND		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
Phenanthrene	**12**		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
Anthracene	ND		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
Fluoranthene	**16**		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
Pyrene	**17**		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
Benzo[a]anthracene	ND		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
Chrysene	ND		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
Benzo[b]fluoranthene	**14**		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
Benzo[k]fluoranthene	ND		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
Benzo[a]pyrene	**11**		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
Indeno[1,2,3-cd]pyrene	ND		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
Dibenz(a,h)anthracene	ND		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1
Benzo[g,h,i]perylene	**11**		11		ug/Kg	☼	09/27/16 14:30	09/28/16 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*75*		*23 - 120*	*09/27/16 14:30*	*09/28/16 14:05*	*1*
2-Fluorobiphenyl (Surr)	*86*		*38 - 123*	*09/27/16 14:30*	*09/28/16 14:05*	*1*
p-Terphenyl-d14	*91*		*68 - 136*	*09/27/16 14:30*	*09/28/16 14:05*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		42		mg/Kg	☼	09/26/16 08:40	09/26/16 18:22	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg	☼	09/26/16 08:40	09/26/16 18:22	1
Residual Range Organics (RRO) (C25-C36)	ND		100		mg/Kg	☼	09/26/16 08:40	09/26/16 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*95*		*50 - 150*	*09/26/16 08:40*	*09/26/16 18:22*	*1*
n-Triacontane-d62	*108*		*50 - 150*	*09/26/16 08:40*	*09/26/16 18:22*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.7**	**J**	6.8	2.4	mg/Kg	☼	09/26/16 08:54	09/29/16 16:46	5
Barium	**160**	**B**	3.4	0.29	mg/Kg	☼	09/26/16 08:54	09/29/16 16:46	5
Cadmium	**0.42**	**J**	3.4	0.19	mg/Kg	☼	09/26/16 08:54	09/29/16 16:46	5
Chromium	**11**	**B**	3.4	0.31	mg/Kg	☼	09/26/16 08:54	09/29/16 16:46	5
Lead	**27**	**B**	6.8	1.9	mg/Kg	☼	09/26/16 08:54	09/29/16 16:46	5
Selenium	ND		16	5.6	mg/Kg	☼	09/26/16 08:54	09/29/16 16:46	5
Silver	ND		3.4	0.29	mg/Kg	☼	09/26/16 08:54	09/29/16 16:46	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**49**		47		ug/Kg	☼	09/29/16 09:11	09/30/16 12:20	1

Client Sample ID: DP-11(1-2):092016
Date Collected: 09/20/16 14:00
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-12
Matrix: Solid
Percent Solids: 95.5

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
2-Methylnaphthalene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
1-Methylnaphthalene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
Acenaphthylene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
Acenaphthene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
Fluorene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
Phenanthrene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
Anthracene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
Fluoranthene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
Pyrene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
Benzo[a]anthracene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
Chrysene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
Benzo[b]fluoranthene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
Benzo[k]fluoranthene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
Benzo[a]pyrene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
Indeno[1,2,3-cd]pyrene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
Dibenz(a,h)anthracene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1
Benzo[g,h,i]perylene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*66*		*23 - 120*	*09/27/16 14:30*	*09/28/16 14:28*	*1*
2-Fluorobiphenyl (Surr)	*79*		*38 - 123*	*09/27/16 14:30*	*09/28/16 14:28*	*1*
p-Terphenyl-d14	*88*		*68 - 136*	*09/27/16 14:30*	*09/28/16 14:28*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		39		mg/Kg	☼	09/26/16 08:40	09/26/16 18:40	1
Diesel Range Organics (DRO) (C10-C25)	ND		96		mg/Kg	☼	09/26/16 08:40	09/26/16 18:40	1
Residual Range Organics (RRO) (C25-C36)	ND		96		mg/Kg	☼	09/26/16 08:40	09/26/16 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*95*		*50 - 150*	*09/26/16 08:40*	*09/26/16 18:40*	*1*
n-Triacontane-d62	*104*		*50 - 150*	*09/26/16 08:40*	*09/26/16 18:40*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.5**	**J**	6.5	2.3	mg/Kg	☼	09/26/16 08:54	09/29/16 16:49	5
Barium	**110**	**B**	3.3	0.28	mg/Kg	☼	09/26/16 08:54	09/29/16 16:49	5
Cadmium	ND		3.3	0.18	mg/Kg	☼	09/26/16 08:54	09/29/16 16:49	5
Chromium	**1.7**	**J B**	3.3	0.30	mg/Kg	☼	09/26/16 08:54	09/29/16 16:49	5
Lead	**4.4**	**J B**	6.5	1.8	mg/Kg	☼	09/26/16 08:54	09/29/16 16:49	5
Selenium	ND		16	5.4	mg/Kg	☼	09/26/16 08:54	09/29/16 16:49	5
Silver	ND		3.3	0.28	mg/Kg	☼	09/26/16 08:54	09/29/16 16:49	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		45		ug/Kg	☼	09/29/16 09:14	09/30/16 12:27	1

Client Sample ID: DP-12(1-2):092016
Date Collected: 09/20/16 14:20
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-13
Matrix: Solid
Percent Solids: 93.6

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**17**		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
2-Methylnaphthalene	**29**		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
1-Methylnaphthalene	**26**		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
Acenaphthylene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
Acenaphthene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
Fluorene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
Phenanthrene	**51**		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
Anthracene	**11**		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
Fluoranthene	**47**		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
Pyrene	**51**		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
Benzo[a]anthracene	**29**		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
Chrysene	**35**		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
Benzo[b]fluoranthene	**38**		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
Benzo[k]fluoranthene	**15**		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
Benzo[a]pyrene	**28**		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
Indeno[1,2,3-cd]pyrene	**22**		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
Dibenz(a,h)anthracene	ND		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1
Benzo[g,h,i]perylene	**29**		10		ug/Kg	☼	09/27/16 14:30	09/28/16 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*72*		*23 - 120*	*09/27/16 14:30*	*09/28/16 14:51*	*1*
2-Fluorobiphenyl (Surr)	*91*		*38 - 123*	*09/27/16 14:30*	*09/28/16 14:51*	*1*
p-Terphenyl-d14	*93*		*68 - 136*	*09/27/16 14:30*	*09/28/16 14:51*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		41		mg/Kg	☼	09/26/16 08:40	09/26/16 18:58	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg	☼	09/26/16 08:40	09/26/16 18:58	1
Residual Range Organics (RRO) (C25-C36)	**110**		100		mg/Kg	☼	09/26/16 08:40	09/26/16 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*109*		*50 - 150*	*09/26/16 08:40*	*09/26/16 18:58*	*1*
n-Triacontane-d62	*121*		*50 - 150*	*09/26/16 08:40*	*09/26/16 18:58*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.6**		6.7	2.4	mg/Kg	☼	09/26/16 08:54	09/29/16 16:52	5
Barium	**120**	**B**	3.4	0.29	mg/Kg	☼	09/26/16 08:54	09/29/16 16:52	5
Cadmium	**0.64**	**J**	3.4	0.19	mg/Kg	☼	09/26/16 08:54	09/29/16 16:52	5
Chromium	**9.3**	**B**	3.4	0.31	mg/Kg	☼	09/26/16 08:54	09/29/16 16:52	5
Lead	**130**	**B**	6.7	1.9	mg/Kg	☼	09/26/16 08:54	09/29/16 16:52	5
Selenium	ND		16	5.6	mg/Kg	☼	09/26/16 08:54	09/29/16 16:52	5
Silver	**0.29**	**J**	3.4	0.29	mg/Kg	☼	09/26/16 08:54	09/29/16 16:52	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**65**		44		ug/Kg	☼	09/29/16 09:14	09/30/16 12:41	1

Client Sample ID: DP-13(0-1):092016
Date Collected: 09/20/16 14:40
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-14
Matrix: Solid
Percent Solids: 96.8

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
2-Methylnaphthalene	ND		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
1-Methylnaphthalene	ND		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
Acenaphthylene	ND		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
Acenaphthene	ND		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
Fluorene	ND		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
Phenanthrene	**120**		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
Anthracene	ND		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
Fluoranthene	**120**		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
Pyrene	**130**		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
Benzo[a]anthracene	ND		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
Chrysene	**110**		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
Benzo[b]fluoranthene	**99**		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
Benzo[k]fluoranthene	ND		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
Benzo[a]pyrene	**82**		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
Indeno[1,2,3-cd]pyrene	ND		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
Dibenz(a,h)anthracene	ND		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1
Benzo[g,h,i]perylene	ND		70		ug/Kg	☼	09/27/16 14:30	09/30/16 12:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*80*		*23 - 120*	*09/27/16 14:30*	*09/30/16 12:16*	*1*
2-Fluorobiphenyl (Surr)	*102*		*38 - 123*	*09/27/16 14:30*	*09/30/16 12:16*	*1*
p-Terphenyl-d14	*125*		*68 - 136*	*09/27/16 14:30*	*09/30/16 12:16*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		38		mg/Kg	☼	09/26/16 08:40	09/26/16 19:16	1
Diesel Range Organics (DRO) (C10-C25)	**100**		94		mg/Kg	☼	09/26/16 08:40	09/26/16 19:16	1
Residual Range Organics (RRO) (C25-C36)	**1500**		94		mg/Kg	☼	09/26/16 08:40	09/26/16 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*50 - 150*	*09/26/16 08:40*	*09/26/16 19:16*	*1*
n-Triacontane-d62	*108*		*50 - 150*	*09/26/16 08:40*	*09/26/16 19:16*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		6.3	2.2	mg/Kg	☼	09/26/16 08:54	09/29/16 16:54	5
Barium	**97**	**B**	3.2	0.27	mg/Kg	☼	09/26/16 08:54	09/29/16 16:54	5
Cadmium	ND		3.2	0.18	mg/Kg	☼	09/26/16 08:54	09/29/16 16:54	5
Chromium	**6.0**	**B**	3.2	0.29	mg/Kg	☼	09/26/16 08:54	09/29/16 16:54	5
Lead	**18**	**B**	6.3	1.7	mg/Kg	☼	09/26/16 08:54	09/29/16 16:54	5
Selenium	ND		15	5.2	mg/Kg	☼	09/26/16 08:54	09/29/16 16:54	5
Silver	ND		3.2	0.27	mg/Kg	☼	09/26/16 08:54	09/29/16 16:54	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		42		ug/Kg	☼	09/29/16 09:14	09/30/16 12:43	1

Client Sample ID: DP-14(1-2):092016
Date Collected: 09/20/16 15:15
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-15
Matrix: Solid
Percent Solids: 83.1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**190**		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
2-Methylnaphthalene	**320**		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
1-Methylnaphthalene	**240**		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
Acenaphthylene	ND		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
Acenaphthene	ND		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
Fluorene	ND		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
Phenanthrene	**120**		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
Anthracene	ND		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
Fluoranthene	ND		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
Pyrene	**80**		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
Benzo[a]anthracene	ND		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
Chrysene	ND		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
Benzo[b]fluoranthene	ND		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
Benzo[k]fluoranthene	ND		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
Benzo[a]pyrene	ND		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
Indeno[1,2,3-cd]pyrene	ND		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
Dibenz(a,h)anthracene	ND		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1
Benzo[g,h,i]perylene	ND		70		ug/Kg	☼	09/27/16 14:30	09/28/16 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*52*		*23 - 120*	*09/27/16 14:30*	*09/28/16 15:36*	*1*
2-Fluorobiphenyl (Surr)	*71*		*38 - 123*	*09/27/16 14:30*	*09/28/16 15:36*	*1*
p-Terphenyl-d14	*105*		*68 - 136*	*09/27/16 14:30*	*09/28/16 15:36*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		47		mg/Kg	☼	09/26/16 08:40	09/26/16 19:34	1
Diesel Range Organics (DRO) (C10-C25)	ND		120		mg/Kg	☼	09/26/16 08:40	09/26/16 19:34	1
Residual Range Organics (RRO) (C25-C36)	ND		120		mg/Kg	☼	09/26/16 08:40	09/26/16 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*105*		*50 - 150*	*09/26/16 08:40*	*09/26/16 19:34*	*1*
n-Triacontane-d62	*121*		*50 - 150*	*09/26/16 08:40*	*09/26/16 19:34*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.4**	**J**	7.4	2.6	mg/Kg	☼	09/26/16 08:54	09/29/16 17:05	5
Barium	**260**	**B**	3.7	0.32	mg/Kg	☼	09/26/16 08:54	09/29/16 17:05	5
Cadmium	**0.32**	**J**	3.7	0.21	mg/Kg	☼	09/26/16 08:54	09/29/16 17:05	5
Chromium	**11**	**B**	3.7	0.34	mg/Kg	☼	09/26/16 08:54	09/29/16 17:05	5
Lead	**40**	**B**	7.4	2.1	mg/Kg	☼	09/26/16 08:54	09/29/16 17:05	5
Selenium	ND		18	6.1	mg/Kg	☼	09/26/16 08:54	09/29/16 17:05	5
Silver	**0.56**	**J**	3.7	0.32	mg/Kg	☼	09/26/16 08:54	09/29/16 17:05	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**63**		49		ug/Kg	☼	09/29/16 09:14	09/30/16 12:46	1

Client Sample ID: DP-15(0.5-1.5):092016
Date Collected: 09/20/16 15:30
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-16
Matrix: Solid
Percent Solids: 81.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	150		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
2-Methylnaphthalene	340		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
1-Methylnaphthalene	280		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
Acenaphthylene	56		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
Acenaphthene	14		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
Fluorene	18		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
Phenanthrene	280		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
Anthracene	55		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
Fluoranthene	78		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
Pyrene	93		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
Benzo[a]anthracene	57		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
Chrysene	110		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
Benzo[b]fluoranthene	110		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
Benzo[k]fluoranthene	30		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
Benzo[a]pyrene	56		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
Indeno[1,2,3-cd]pyrene	62		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
Dibenz(a,h)anthracene	22		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1
Benzo[g,h,i]perylene	95		12		ug/Kg	☼	09/27/16 14:30	09/28/16 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*87*		*23 - 120*	*09/27/16 14:30*	*09/28/16 15:59*	*1*
2-Fluorobiphenyl (Surr)	*101*		*38 - 123*	*09/27/16 14:30*	*09/28/16 15:59*	*1*
p-Terphenyl-d14	*101*		*68 - 136*	*09/27/16 14:30*	*09/28/16 15:59*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		46		mg/Kg	☼	09/26/16 08:40	09/26/16 19:52	1
Diesel Range Organics (DRO) (C10-C25)	120		120		mg/Kg	☼	09/26/16 08:40	09/26/16 19:52	1
Residual Range Organics (RRO) (C25-C36)	280		120		mg/Kg	☼	09/26/16 08:40	09/26/16 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*100*		*50 - 150*	*09/26/16 08:40*	*09/26/16 19:52*	*1*
n-Triacontane-d62	*112*		*50 - 150*	*09/26/16 08:40*	*09/26/16 19:52*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.1		7.7	2.7	mg/Kg	☼	09/26/16 08:54	09/29/16 17:07	5
Barium	310	B	3.8	0.33	mg/Kg	☼	09/26/16 08:54	09/29/16 17:07	5
Cadmium	1.5	J	3.8	0.22	mg/Kg	☼	09/26/16 08:54	09/29/16 17:07	5
Chromium	6.3	B	3.8	0.35	mg/Kg	☼	09/26/16 08:54	09/29/16 17:07	5
Lead	540	B	7.7	2.1	mg/Kg	☼	09/26/16 08:54	09/29/16 17:07	5
Selenium	ND		18	6.3	mg/Kg	☼	09/26/16 08:54	09/29/16 17:07	5
Silver	3.5	J	3.8	0.33	mg/Kg	☼	09/26/16 08:54	09/29/16 17:07	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	86		49		ug/Kg	☼	09/29/16 09:14	09/30/16 12:48	1

Client Sample ID: DP-16(2-3):092016
Date Collected: 09/20/16 15:50
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-17
Matrix: Solid
Percent Solids: 91.6

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**30**		11		ug/Kg	☼	09/27/16 14:30	09/28/16 16:22	1
2-Methylnaphthalene	**92**		11		ug/Kg	☼	09/27/16 14:30	09/28/16 16:22	1
1-Methylnaphthalene	**85**		11		ug/Kg	☼	09/27/16 14:30	09/28/16 16:22	1
Acenaphthylene	**17**		11		ug/Kg	☼	09/27/16 14:30	09/28/16 16:22	1
Acenaphthene	**130**		11		ug/Kg	☼	09/27/16 14:30	09/28/16 16:22	1
Fluorene	**190**		11		ug/Kg	☼	09/27/16 14:30	09/28/16 16:22	1
Phenanthrene	**130**		53		ug/Kg	☼	09/27/16 14:30	09/30/16 11:54	5
Anthracene	**240**		53		ug/Kg	☼	09/27/16 14:30	09/30/16 11:54	5
Fluoranthene	**150**		53		ug/Kg	☼	09/27/16 14:30	09/30/16 11:54	5
Pyrene	**610**		53		ug/Kg	☼	09/27/16 14:30	09/30/16 11:54	5
Benzo[a]anthracene	**120**		53		ug/Kg	☼	09/27/16 14:30	09/30/16 11:54	5
Chrysene	**230**		53		ug/Kg	☼	09/27/16 14:30	09/30/16 11:54	5
Benzo[b]fluoranthene	ND		53		ug/Kg	☼	09/27/16 14:30	09/30/16 11:54	5
Benzo[k]fluoranthene	ND		53		ug/Kg	☼	09/27/16 14:30	09/30/16 11:54	5
Benzo[a]pyrene	ND		53		ug/Kg	☼	09/27/16 14:30	09/30/16 11:54	5
Indeno[1,2,3-cd]pyrene	ND		53		ug/Kg	☼	09/27/16 14:30	09/30/16 11:54	5
Dibenz(a,h)anthracene	ND		53		ug/Kg	☼	09/27/16 14:30	09/30/16 11:54	5
Benzo[g,h,i]perylene	**63**		53		ug/Kg	☼	09/27/16 14:30	09/30/16 11:54	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*79*		*23 - 120*	*09/27/16 14:30*	*09/28/16 16:22*	*1*
Nitrobenzene-d5	*79*		*23 - 120*	*09/27/16 14:30*	*09/30/16 11:54*	*5*
2-Fluorobiphenyl (Surr)	*108*		*38 - 123*	*09/27/16 14:30*	*09/28/16 16:22*	*1*
2-Fluorobiphenyl (Surr)	*100*		*38 - 123*	*09/27/16 14:30*	*09/30/16 11:54*	*5*
p-Terphenyl-d14	*0*	*X*	*68 - 136*	*09/27/16 14:30*	*09/28/16 16:22*	*1*
p-Terphenyl-d14	*101*		*68 - 136*	*09/27/16 14:30*	*09/30/16 11:54*	*5*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		42		mg/Kg	☼	09/26/16 08:55	09/26/16 14:20	1
Diesel Range Organics (DRO) (C10-C25)	**7100**		110		mg/Kg	☼	09/26/16 08:55	09/26/16 14:20	1
Residual Range Organics (RRO) (C25-C36)	**11000**		110		mg/Kg	☼	09/26/16 08:55	09/26/16 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*129*		*50 - 150*	*09/26/16 08:55*	*09/26/16 14:20*	*1*
n-Triacontane-d62	*132*		*50 - 150*	*09/26/16 08:55*	*09/26/16 14:20*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		6.6	2.3	mg/Kg	☼	09/26/16 08:54	09/29/16 17:09	5
Barium	**91**	**B**	3.3	0.28	mg/Kg	☼	09/26/16 08:54	09/29/16 17:09	5
Cadmium	**0.25**	**J**	3.3	0.19	mg/Kg	☼	09/26/16 08:54	09/29/16 17:09	5
Chromium	**2.4**	**J B**	3.3	0.30	mg/Kg	☼	09/26/16 08:54	09/29/16 17:09	5
Lead	**47**	**B**	6.6	1.8	mg/Kg	☼	09/26/16 08:54	09/29/16 17:09	5
Selenium	ND		16	5.5	mg/Kg	☼	09/26/16 08:54	09/29/16 17:09	5
Silver	ND		3.3	0.28	mg/Kg	☼	09/26/16 08:54	09/29/16 17:09	5

Client Sample ID: DP-16(2-3):092016

Lab Sample ID: 590-4572-17
Date Collected: 09/20/16 15:50
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 91.6

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**600**		47		ug/Kg	☼	09/29/16 09:14	09/30/16 12:50	1

Client Sample ID: DP-17(1-2):092116

Lab Sample ID: 590-4572-18
Date Collected: 09/21/16 09:05
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
2-Methylnaphthalene	**14**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
1-Methylnaphthalene	**10**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
Acenaphthylene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
Acenaphthene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
Fluorene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
Phenanthrene	**25**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
Anthracene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
Fluoranthene	**38**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
Pyrene	**41**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
Benzo[a]anthracene	**21**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
Chrysene	**27**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
Benzo[b]fluoranthene	**44**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
Benzo[k]fluoranthene	**14**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
Benzo[a]pyrene	**27**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
Indeno[1,2,3-cd]pyrene	**17**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
Dibenz(a,h)anthracene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1
Benzo[g,h,i]perylene	**19**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92*		*23 - 120*	*09/27/16 14:30*	*09/30/16 00:04*	*1*
2-Fluorobiphenyl (Surr)	*89*		*38 - 123*	*09/27/16 14:30*	*09/30/16 00:04*	*1*
p-Terphenyl-d14	*124*		*68 - 136*	*09/27/16 14:30*	*09/30/16 00:04*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		39		mg/Kg	☼	09/26/16 08:55	09/26/16 14:58	1
Diesel Range Organics (DRO) (C10-C25)	ND		98		mg/Kg	☼	09/26/16 08:55	09/26/16 14:58	1
Residual Range Organics (RRO) (C25-C36)	ND		98		mg/Kg	☼	09/26/16 08:55	09/26/16 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*102*		*50 - 150*	*09/26/16 08:55*	*09/26/16 14:58*	*1*
n-Triacontane-d62	*113*		*50 - 150*	*09/26/16 08:55*	*09/26/16 14:58*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.3**		6.6	2.3	mg/Kg	☼	09/26/16 08:54	09/29/16 17:12	5
Barium	**110**	**B**	3.3	0.28	mg/Kg	☼	09/26/16 08:54	09/29/16 17:12	5
Cadmium	**2.4**	**J**	3.3	0.19	mg/Kg	☼	09/26/16 08:54	09/29/16 17:12	5
Chromium	**7.5**	**B**	3.3	0.30	mg/Kg	☼	09/26/16 08:54	09/29/16 17:12	5
Lead	**1300**	**B**	6.6	1.8	mg/Kg	☼	09/26/16 08:54	09/29/16 17:12	5

Client Sample ID: DP-17(1-2):092116

Lab Sample ID: 590-4572-18
Date Collected: 09/21/16 09:05
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.2

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		16	5.5	mg/Kg	☼	09/26/16 08:54	09/29/16 17:12	5
Silver	**2.9**	**J**	3.3	0.28	mg/Kg	☼	09/26/16 08:54	09/29/16 17:12	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**160**		49		ug/Kg	☼	09/29/16 09:14	09/30/16 12:52	1

Client Sample ID: DP-18(1.5-2.5):092116

Lab Sample ID: 590-4572-19
Date Collected: 09/21/16 10:00
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 95.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
2-Methylnaphthalene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
1-Methylnaphthalene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
Acenaphthylene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
Acenaphthene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
Fluorene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
Phenanthrene	**25**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
Anthracene	**11**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
Fluoranthene	**78**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
Pyrene	**120**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
Benzo[a]anthracene	**64**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
Chrysene	**75**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
Benzo[b]fluoranthene	**110**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
Benzo[k]fluoranthene	**110**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
Benzo[a]pyrene	**85**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
Indeno[1,2,3-cd]pyrene	**37**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
Dibenz(a,h)anthracene	**14**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1
Benzo[g,h,i]perylene	**37**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 00:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*79*		*23 - 120*	*09/27/16 14:30*	*09/30/16 00:27*	*1*
2-Fluorobiphenyl (Surr)	*92*		*38 - 123*	*09/27/16 14:30*	*09/30/16 00:27*	*1*
p-Terphenyl-d14	*126*		*68 - 136*	*09/27/16 14:30*	*09/30/16 00:27*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		41		mg/Kg	☼	09/26/16 08:55	09/26/16 15:36	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg	☼	09/26/16 08:55	09/26/16 15:36	1
Residual Range Organics (RRO) (C25-C36)	ND		100		mg/Kg	☼	09/26/16 08:55	09/26/16 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*102*		*50 - 150*	*09/26/16 08:55*	*09/26/16 15:36*	*1*
n-Triacontane-d62	*106*		*50 - 150*	*09/26/16 08:55*	*09/26/16 15:36*	*1*

Client Sample ID: DP-18(1.5-2.5):092116

Lab Sample ID: 590-4572-19
Date Collected: 09/21/16 10:00
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 95.0

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**14**		6.4	2.3	mg/Kg	☼	09/26/16 08:56	09/29/16 17:20	5
Barium	**73**	**F1**	3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 17:20	5
Cadmium	ND		3.2	0.18	mg/Kg	☼	09/26/16 08:56	09/29/16 17:20	5
Chromium	**9.2**		3.2	0.29	mg/Kg	☼	09/26/16 08:56	09/29/16 17:20	5
Lead	**36**	**F1 F2**	6.4	1.8	mg/Kg	☼	09/26/16 08:56	09/29/16 17:20	5
Selenium	ND		15	5.3	mg/Kg	☼	09/26/16 08:56	09/29/16 17:20	5
Silver	ND		3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 17:20	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**79**		47		ug/Kg	☼	09/29/16 09:14	09/30/16 12:55	1

Client Sample ID: DP-19(1.5-2.5):092116

Lab Sample ID: 590-4572-20
Date Collected: 09/21/16 10:20
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 94.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
2-Methylnaphthalene	ND		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
1-Methylnaphthalene	ND		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
Acenaphthylene	ND		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
Acenaphthene	ND		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
Fluorene	ND		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
Phenanthrene	ND		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
Anthracene	ND		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
Fluoranthene	ND		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
Pyrene	ND		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
Benzo[a]anthracene	ND		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
Chrysene	**160**		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
Benzo[b]fluoranthene	**99**		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
Benzo[k]fluoranthene	ND		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
Benzo[a]pyrene	ND		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
Indeno[1,2,3-cd]pyrene	ND		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
Dibenz(a,h)anthracene	ND		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1
Benzo[g,h,i]perylene	**67**		62		ug/Kg	☼	09/27/16 14:30	09/30/16 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*76*		*23 - 120*	*09/27/16 14:30*	*09/30/16 12:39*	*1*
2-Fluorobiphenyl (Surr)	*72*		*38 - 123*	*09/27/16 14:30*	*09/30/16 12:39*	*1*
p-Terphenyl-d14	*108*		*68 - 136*	*09/27/16 14:30*	*09/30/16 12:39*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		80		mg/Kg	☼	09/26/16 08:55	09/26/16 15:55	2
Diesel Range Organics (DRO) (C10-C25)	ND		200		mg/Kg	☼	09/26/16 08:55	09/26/16 15:55	2
Residual Range Organics (RRO) (C25-C36)	**2800**		200		mg/Kg	☼	09/26/16 08:55	09/26/16 15:55	2

Client Sample ID: DP-19(1.5-2.5):092116

Lab Sample ID: 590-4572-20
Date Collected: 09/21/16 10:20
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 94.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	100		50 - 150	09/26/16 08:55	09/26/16 15:55	2
n-Triacontane-d62	102		50 - 150	09/26/16 08:55	09/26/16 15:55	2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.3**	**J**	6.7	2.4	mg/Kg	☼	09/26/16 08:56	09/29/16 17:40	5
Barium	**64**		3.3	0.28	mg/Kg	☼	09/26/16 08:56	09/29/16 17:40	5
Cadmium	ND		3.3	0.19	mg/Kg	☼	09/26/16 08:56	09/29/16 17:40	5
Chromium	**4.3**		3.3	0.31	mg/Kg	☼	09/26/16 08:56	09/29/16 17:40	5
Lead	**7.5**		6.7	1.8	mg/Kg	☼	09/26/16 08:56	09/29/16 17:40	5
Selenium	ND		16	5.5	mg/Kg	☼	09/26/16 08:56	09/29/16 17:40	5
Silver	ND		3.3	0.28	mg/Kg	☼	09/26/16 08:56	09/29/16 17:40	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		49		ug/Kg	☼	09/29/16 09:14	09/30/16 13:02	1

Client Sample ID: DP-20(1-2):092116

Lab Sample ID: 590-4572-21
Date Collected: 09/21/16 10:40
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 98.1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
2-Methylnaphthalene	ND		580		ug/Kg	☼	09/27/16 14:30	09/30/16 01:13	10
1-Methylnaphthalene	ND		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
Acenaphthylene	ND		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
Acenaphthene	ND		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
Fluorene	ND		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
Phenanthrene	**120**		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
Anthracene	**120**		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
Fluoranthene	ND		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
Pyrene	**73**		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
Benzo[a]anthracene	ND		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
Chrysene	**200**		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
Benzo[b]fluoranthene	**130**		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
Benzo[k]fluoranthene	ND		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
Benzo[a]pyrene	ND		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
Indeno[1,2,3-cd]pyrene	ND		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
Dibenz(a,h)anthracene	ND		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1
Benzo[g,h,i]perylene	**78**		58		ug/Kg	☼	09/27/16 14:30	09/30/16 13:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	81		23 - 120	09/27/16 14:30	09/30/16 01:13	10
Nitrobenzene-d5	66		23 - 120	09/27/16 14:30	09/30/16 13:02	1
2-Fluorobiphenyl (Surr)	97		38 - 123	09/27/16 14:30	09/30/16 01:13	10
2-Fluorobiphenyl (Surr)	84		38 - 123	09/27/16 14:30	09/30/16 13:02	1
p-Terphenyl-d14	124		68 - 136	09/27/16 14:30	09/30/16 01:13	10
p-Terphenyl-d14	124		68 - 136	09/27/16 14:30	09/30/16 13:02	1

Client Sample ID: DP-20(1-2):092116

Date Collected: 09/21/16 10:40
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-21

Matrix: Solid
Percent Solids: 98.1

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		78		mg/Kg	☼	09/26/16 08:55	09/26/16 16:14	2
Diesel Range Organics (DRO) (C10-C25)	**440**		200		mg/Kg	☼	09/26/16 08:55	09/26/16 16:14	2
Residual Range Organics (RRO) (C25-C36)	**5100**		200		mg/Kg	☼	09/26/16 08:55	09/26/16 16:14	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*103*		*50 - 150*	*09/26/16 08:55*	*09/26/16 16:14*	*2*
n-Triacontane-d62	*64*		*50 - 150*	*09/26/16 08:55*	*09/26/16 16:14*	*2*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.3**	**J**	6.2	2.2	mg/Kg	☼	09/26/16 08:56	09/29/16 17:43	5
Barium	**40**		3.1	0.26	mg/Kg	☼	09/26/16 08:56	09/29/16 17:43	5
Cadmium	ND		3.1	0.17	mg/Kg	☼	09/26/16 08:56	09/29/16 17:43	5
Chromium	**8.6**		3.1	0.28	mg/Kg	☼	09/26/16 08:56	09/29/16 17:43	5
Lead	**17**		6.2	1.7	mg/Kg	☼	09/26/16 08:56	09/29/16 17:43	5
Selenium	ND		15	5.1	mg/Kg	☼	09/26/16 08:56	09/29/16 17:43	5
Silver	ND		3.1	0.26	mg/Kg	☼	09/26/16 08:56	09/29/16 17:43	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		46		ug/Kg	☼	09/29/16 09:14	09/30/16 13:04	1

Client Sample ID: DP-21(1-2):092116

Date Collected: 09/21/16 11:00
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-22

Matrix: Solid
Percent Solids: 97.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		61		ug/Kg	☼	09/27/16 14:30	09/30/16 13:24	1
2-Methylnaphthalene	ND		61		ug/Kg	☼	09/27/16 14:30	09/30/16 13:24	1
1-Methylnaphthalene	ND		61		ug/Kg	☼	09/27/16 14:30	09/30/16 13:24	1
Acenaphthylene	ND		61		ug/Kg	☼	09/27/16 14:30	09/30/16 13:24	1
Acenaphthene	ND		61		ug/Kg	☼	09/27/16 14:30	09/30/16 13:24	1
Fluorene	ND		61		ug/Kg	☼	09/27/16 14:30	09/30/16 13:24	1
Phenanthrene	ND		61		ug/Kg	☼	09/27/16 14:30	09/30/16 13:24	1
Anthracene	ND		61		ug/Kg	☼	09/27/16 14:30	09/30/16 13:24	1
Fluoranthene	ND		61		ug/Kg	☼	09/27/16 14:30	09/30/16 13:24	1
Pyrene	**110**		61		ug/Kg	☼	09/27/16 14:30	09/30/16 13:24	1
Benzo[a]anthracene	**190**		61		ug/Kg	☼	09/27/16 14:30	09/30/16 13:24	1
Chrysene	ND		61		ug/Kg	☼	09/27/16 14:30	09/30/16 13:24	1
Benzo[b]fluoranthene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 01:35	20
Benzo[k]fluoranthene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 01:35	20
Benzo[a]pyrene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 01:35	20
Indeno[1,2,3-cd]pyrene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 01:35	20
Dibenz(a,h)anthracene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 01:35	20
Benzo[g,h,i]perylene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 01:35	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*87*		*23 - 120*	*09/27/16 14:30*	*09/30/16 01:35*	*20*

Client Sample ID: DP-21(1-2):092116

Lab Sample ID: 590-4572-22
Date Collected: 09/21/16 11:00
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 97.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*68*		*23 - 120*	*09/27/16 14:30*	*09/30/16 13:24*	*1*
2-Fluorobiphenyl (Surr)	*116*		*38 - 123*	*09/27/16 14:30*	*09/30/16 01:35*	*20*
2-Fluorobiphenyl (Surr)	*82*		*38 - 123*	*09/27/16 14:30*	*09/30/16 13:24*	*1*
p-Terphenyl-d14	*129*		*68 - 136*	*09/27/16 14:30*	*09/30/16 01:35*	*20*
p-Terphenyl-d14	*150*	*X*	*68 - 136*	*09/27/16 14:30*	*09/30/16 13:24*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		76		mg/Kg	☼	09/26/16 08:55	09/26/16 16:33	2
Diesel Range Organics (DRO) (C10-C25)	**310**		190		mg/Kg	☼	09/26/16 08:55	09/26/16 16:33	2
Residual Range Organics (RRO) (C25-C36)	**4200**		190		mg/Kg	☼	09/26/16 08:55	09/26/16 16:33	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	*96*		*50 - 150*	*09/26/16 08:55*	*09/26/16 16:33*	*2*
n-Triacontane-d62	*69*		*50 - 150*	*09/26/16 08:55*	*09/26/16 16:33*	*2*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.5**	**J**	6.4	2.2	mg/Kg	☼	09/26/16 08:56	09/29/16 17:46	5
Barium	**61**		3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 17:46	5
Cadmium	ND		3.2	0.18	mg/Kg	☼	09/26/16 08:56	09/29/16 17:46	5
Chromium	**9.1**		3.2	0.29	mg/Kg	☼	09/26/16 08:56	09/29/16 17:46	5
Lead	**4.9**	**J**	6.4	1.8	mg/Kg	☼	09/26/16 08:56	09/29/16 17:46	5
Selenium	ND		15	5.2	mg/Kg	☼	09/26/16 08:56	09/29/16 17:46	5
Silver	ND		3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 17:46	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		49		ug/Kg	☼	09/29/16 09:14	09/30/16 13:06	1

Client Sample ID: DP-22(2-3):092116

Lab Sample ID: 590-4572-23
Date Collected: 09/21/16 11:40
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 96.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		120		ug/Kg	☼	09/27/16 14:30	09/30/16 13:47	2
2-Methylnaphthalene	ND		120		ug/Kg	☼	09/27/16 14:30	09/30/16 13:47	2
1-Methylnaphthalene	ND		120		ug/Kg	☼	09/27/16 14:30	09/30/16 13:47	2
Acenaphthylene	ND		120		ug/Kg	☼	09/27/16 14:30	09/30/16 13:47	2
Acenaphthene	ND		120		ug/Kg	☼	09/27/16 14:30	09/30/16 13:47	2
Fluorene	ND		120		ug/Kg	☼	09/27/16 14:30	09/30/16 13:47	2
Phenanthrene	**300**		120		ug/Kg	☼	09/27/16 14:30	09/30/16 13:47	2
Anthracene	ND		120		ug/Kg	☼	09/27/16 14:30	09/30/16 13:47	2
Fluoranthene	**750**		120		ug/Kg	☼	09/27/16 14:30	09/30/16 13:47	2
Pyrene	**1400**		120		ug/Kg	☼	09/27/16 14:30	09/30/16 13:47	2
Benzo[a]anthracene	**440**		120		ug/Kg	☼	09/27/16 14:30	09/30/16 13:47	2
Chrysene	**560**		120		ug/Kg	☼	09/27/16 14:30	09/30/16 13:47	2
Benzo[b]fluoranthene	**1200**		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 01:58	20

Client Sample ID: DP-22(2-3):092116

Lab Sample ID: 590-4572-23
Date Collected: 09/21/16 11:40
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 96.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 01:58	20
Benzo[a]pyrene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 01:58	20
Indeno[1,2,3-cd]pyrene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 01:58	20
Dibenz(a,h)anthracene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 01:58	20
Benzo[g,h,i]perylene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 01:58	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*84*		*23 - 120*	*09/27/16 14:30*	*09/30/16 01:58*	*20*
Nitrobenzene-d5	*61*		*23 - 120*	*09/27/16 14:30*	*09/30/16 13:47*	*2*
2-Fluorobiphenyl (Surr)	*115*		*38 - 123*	*09/27/16 14:30*	*09/30/16 01:58*	*20*
2-Fluorobiphenyl (Surr)	*90*		*38 - 123*	*09/27/16 14:30*	*09/30/16 13:47*	*2*
p-Terphenyl-d14	*132*		*68 - 136*	*09/27/16 14:30*	*09/30/16 01:58*	*20*
p-Terphenyl-d14	*135*		*68 - 136*	*09/27/16 14:30*	*09/30/16 13:47*	*2*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		78		mg/Kg	☼	09/26/16 08:55	09/26/16 16:51	2
Diesel Range Organics (DRO) (C10-C25)	**290**		200		mg/Kg	☼	09/26/16 08:55	09/26/16 16:51	2
Residual Range Organics (RRO) (C25-C36)	**3500**		200		mg/Kg	☼	09/26/16 08:55	09/26/16 16:51	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*50 - 150*	*09/26/16 08:55*	*09/26/16 16:51*	*2*
n-Triacontane-d62	*80*		*50 - 150*	*09/26/16 08:55*	*09/26/16 16:51*	*2*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.1**	**J**	6.4	2.3	mg/Kg	☼	09/26/16 08:56	09/29/16 17:49	5
Barium	**43**		3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 17:49	5
Cadmium	**0.73**	**J**	3.2	0.18	mg/Kg	☼	09/26/16 08:56	09/29/16 17:49	5
Chromium	**9.8**		3.2	0.29	mg/Kg	☼	09/26/16 08:56	09/29/16 17:49	5
Lead	**160**		6.4	1.8	mg/Kg	☼	09/26/16 08:56	09/29/16 17:49	5
Selenium	ND		15	5.3	mg/Kg	☼	09/26/16 08:56	09/29/16 17:49	5
Silver	ND		3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 17:49	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		48		ug/Kg	☼	09/29/16 09:14	09/30/16 13:09	1

Client Sample ID: DP-23(1-2):092116

Lab Sample ID: 590-4572-24
Date Collected: 09/21/16 12:15
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 98.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		120		ug/Kg	☼	09/27/16 14:30	09/30/16 14:10	2
2-Methylnaphthalene	ND		120		ug/Kg	☼	09/27/16 14:30	09/30/16 14:10	2
1-Methylnaphthalene	ND		120		ug/Kg	☼	09/27/16 14:30	09/30/16 14:10	2
Acenaphthylene	ND		120		ug/Kg	☼	09/27/16 14:30	09/30/16 14:10	2
Acenaphthene	ND		120		ug/Kg	☼	09/27/16 14:30	09/30/16 14:10	2

Client Sample ID: DP-23(1-2):092116
Date Collected: 09/21/16 12:15
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-24
Matrix: Solid
Percent Solids: 98.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		120		ug/Kg	☼	09/27/16 14:30	09/30/16 14:10	2
Phenanthrene	**260**		120		ug/Kg	☼	09/27/16 14:30	09/30/16 14:10	2
Anthracene	ND		120		ug/Kg	☼	09/27/16 14:30	09/30/16 14:10	2
Fluoranthene	**140**		120		ug/Kg	☼	09/27/16 14:30	09/30/16 14:10	2
Pyrene	**270**		120		ug/Kg	☼	09/27/16 14:30	09/30/16 14:10	2
Benzo[a]anthracene	ND		120		ug/Kg	☼	09/27/16 14:30	09/30/16 14:10	2
Chrysene	**440**		120		ug/Kg	☼	09/27/16 14:30	09/30/16 14:10	2
Benzo[b]fluoranthene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 02:21	20
Benzo[k]fluoranthene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 02:21	20
Benzo[a]pyrene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 02:21	20
Indeno[1,2,3-cd]pyrene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 02:21	20
Dibenz(a,h)anthracene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 02:21	20
Benzo[g,h,i]perylene	ND		1200		ug/Kg	☼	09/27/16 14:30	09/30/16 02:21	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*67*		*23 - 120*	*09/27/16 14:30*	*09/30/16 02:21*	*20*
Nitrobenzene-d5	*54*		*23 - 120*	*09/27/16 14:30*	*09/30/16 14:10*	*2*
2-Fluorobiphenyl (Surr)	*99*		*38 - 123*	*09/27/16 14:30*	*09/30/16 02:21*	*20*
2-Fluorobiphenyl (Surr)	*84*		*38 - 123*	*09/27/16 14:30*	*09/30/16 14:10*	*2*
p-Terphenyl-d14	*109*		*68 - 136*	*09/27/16 14:30*	*09/30/16 02:21*	*20*
p-Terphenyl-d14	*122*		*68 - 136*	*09/27/16 14:30*	*09/30/16 14:10*	*2*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		75		mg/Kg	☼	09/26/16 08:55	09/26/16 17:10	2
Diesel Range Organics (DRO) (C10-C25)	**870**		190		mg/Kg	☼	09/26/16 08:55	09/26/16 17:10	2
Residual Range Organics (RRO) (C25-C36)	**6700**		190		mg/Kg	☼	09/26/16 08:55	09/26/16 17:10	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*107*		*50 - 150*	*09/26/16 08:55*	*09/26/16 17:10*	*2*
n-Triacontane-d62	*203*	*X*	*50 - 150*	*09/26/16 08:55*	*09/26/16 17:10*	*2*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.2**	**J**	6.4	2.2	mg/Kg	☼	09/26/16 08:56	09/29/16 17:53	5
Barium	**23**		3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 17:53	5
Cadmium	ND		3.2	0.18	mg/Kg	☼	09/26/16 08:56	09/29/16 17:53	5
Chromium	**1.9**	**J**	3.2	0.29	mg/Kg	☼	09/26/16 08:56	09/29/16 17:53	5
Lead	**2.1**	**J**	6.4	1.8	mg/Kg	☼	09/26/16 08:56	09/29/16 17:53	5
Selenium	ND		15	5.2	mg/Kg	☼	09/26/16 08:56	09/29/16 17:53	5
Silver	**0.28**	**J B**	3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 17:53	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		50		ug/Kg	☼	09/29/16 09:14	09/30/16 13:11	1

Client Sample ID: DP-24(1-2):092116
Date Collected: 09/21/16 12:30
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-25
Matrix: Solid
Percent Solids: 95.9

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
2-Methylnaphthalene	ND		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
1-Methylnaphthalene	ND		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
Acenaphthylene	ND		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
Acenaphthene	ND		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
Fluorene	ND		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
Phenanthrene	**30**		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
Anthracene	ND		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
Fluoranthene	**41**		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
Pyrene	**54**		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
Benzo[a]anthracene	ND		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
Chrysene	**50**		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
Benzo[b]fluoranthene	**52**		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
Benzo[k]fluoranthene	ND		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
Benzo[a]pyrene	**38**		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
Indeno[1,2,3-cd]pyrene	ND		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
Dibenz(a,h)anthracene	ND		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1
Benzo[g,h,i]perylene	ND		26		ug/Kg	☼	09/27/16 14:30	09/30/16 02:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*		*23 - 120*	*09/27/16 14:30*	*09/30/16 02:43*	*1*
2-Fluorobiphenyl (Surr)	*91*		*38 - 123*	*09/27/16 14:30*	*09/30/16 02:43*	*1*
p-Terphenyl-d14	*130*		*68 - 136*	*09/27/16 14:30*	*09/30/16 02:43*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		39		mg/Kg	☼	09/26/16 08:55	09/26/16 17:28	1
Diesel Range Organics (DRO) (C10-C25)	ND		98		mg/Kg	☼	09/26/16 08:55	09/26/16 17:28	1
Residual Range Organics (RRO) (C25-C36)	**330**		98		mg/Kg	☼	09/26/16 08:55	09/26/16 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*106*		*50 - 150*	*09/26/16 08:55*	*09/26/16 17:28*	*1*
n-Triacontane-d62	*116*		*50 - 150*	*09/26/16 08:55*	*09/26/16 17:28*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.9**		6.3	2.2	mg/Kg	☼	09/26/16 08:56	09/29/16 17:56	5
Barium	**89**		3.1	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 17:56	5
Cadmium	**0.22**	**J**	3.1	0.18	mg/Kg	☼	09/26/16 08:56	09/29/16 17:56	5
Chromium	**9.6**		3.1	0.29	mg/Kg	☼	09/26/16 08:56	09/29/16 17:56	5
Lead	**68**		6.3	1.7	mg/Kg	☼	09/26/16 08:56	09/29/16 17:56	5
Selenium	ND		15	5.2	mg/Kg	☼	09/26/16 08:56	09/29/16 17:56	5
Silver	ND		3.1	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 17:56	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		47		ug/Kg	☼	09/29/16 09:14	09/30/16 13:13	1

Client Sample ID: DP-25(1-2):092116
Date Collected: 09/21/16 13:00
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-26
Matrix: Solid
Percent Solids: 94.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
2-Methylnaphthalene	14		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
1-Methylnaphthalene	12		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
Acenaphthylene	16		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
Acenaphthene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
Fluorene	11		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
Phenanthrene	110		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
Anthracene	36		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
Fluoranthene	220		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
Pyrene	250		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
Benzo[a]anthracene	130		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
Chrysene	150		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
Benzo[b]fluoranthene	230		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
Benzo[k]fluoranthene	78		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
Benzo[a]pyrene	150		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
Indeno[1,2,3-cd]pyrene	53		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
Dibenz(a,h)anthracene	20		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1
Benzo[g,h,i]perylene	54		10		ug/Kg	☼	09/27/16 14:30	09/30/16 03:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*82*		*23 - 120*	*09/27/16 14:30*	*09/30/16 03:06*	*1*
2-Fluorobiphenyl (Surr)	*86*		*38 - 123*	*09/27/16 14:30*	*09/30/16 03:06*	*1*
p-Terphenyl-d14	*106*		*68 - 136*	*09/27/16 14:30*	*09/30/16 03:06*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		41		mg/Kg	☼	09/26/16 08:55	09/26/16 17:46	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg	☼	09/26/16 08:55	09/26/16 17:46	1
Residual Range Organics (RRO) (C25-C36)	ND		100		mg/Kg	☼	09/26/16 08:55	09/26/16 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*105*		*50 - 150*	*09/26/16 08:55*	*09/26/16 17:46*	*1*
n-Triacontane-d62	*113*		*50 - 150*	*09/26/16 08:55*	*09/26/16 17:46*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	16		6.5	2.3	mg/Kg	☼	09/26/16 08:56	09/29/16 17:58	5
Barium	140		3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 17:58	5
Cadmium	1.4	J	3.2	0.18	mg/Kg	☼	09/26/16 08:56	09/29/16 17:58	5
Chromium	13		3.2	0.29	mg/Kg	☼	09/26/16 08:56	09/29/16 17:58	5
Lead	950		6.5	1.8	mg/Kg	☼	09/26/16 08:56	09/29/16 17:58	5
Selenium	ND		15	5.3	mg/Kg	☼	09/26/16 08:56	09/29/16 17:58	5
Silver	1.1	J B	3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 17:58	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	760		49		ug/Kg	☼	09/29/16 09:14	09/30/16 13:16	1

Client Sample ID: DP-26(1.5-2.5):092116
Date Collected: 09/21/16 14:40
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-27
Matrix: Solid
Percent Solids: 96.1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		260		ug/Kg	☼	09/27/16 14:30	09/30/16 03:29	10
2-Methylnaphthalene	ND		260		ug/Kg	☼	09/27/16 14:30	09/30/16 03:29	10
1-Methylnaphthalene	ND		260		ug/Kg	☼	09/27/16 14:30	09/30/16 03:29	10
Acenaphthylene	ND		130		ug/Kg	☼	09/27/16 14:30	09/30/16 11:29	5
Acenaphthene	ND		130		ug/Kg	☼	09/27/16 14:30	09/30/16 11:29	5
Fluorene	ND		130		ug/Kg	☼	09/27/16 14:30	09/30/16 11:29	5
Phenanthrene	**410**		260		ug/Kg	☼	09/27/16 14:30	09/30/16 03:29	10
Anthracene	ND		130		ug/Kg	☼	09/27/16 14:30	09/30/16 11:29	5
Fluoranthene	**590**		260		ug/Kg	☼	09/27/16 14:30	09/30/16 03:29	10
Pyrene	**720**		260		ug/Kg	☼	09/27/16 14:30	09/30/16 03:29	10
Benzo[a]anthracene	**340**		260		ug/Kg	☼	09/27/16 14:30	09/30/16 03:29	10
Chrysene	**360**		260		ug/Kg	☼	09/27/16 14:30	09/30/16 03:29	10
Benzo[b]fluoranthene	**510**		260		ug/Kg	☼	09/27/16 14:30	09/30/16 03:29	10
Benzo[k]fluoranthene	ND		130		ug/Kg	☼	09/27/16 14:30	09/30/16 11:29	5
Benzo[a]pyrene	**390**		260		ug/Kg	☼	09/27/16 14:30	09/30/16 03:29	10
Indeno[1,2,3-cd]pyrene	**240**		130		ug/Kg	☼	09/27/16 14:30	09/30/16 11:29	5
Dibenz(a,h)anthracene	ND		130		ug/Kg	☼	09/27/16 14:30	09/30/16 11:29	5
Benzo[g,h,i]perylene	**270**		130		ug/Kg	☼	09/27/16 14:30	09/30/16 11:29	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*82*		*23 - 120*	*09/27/16 14:30*	*09/30/16 03:29*	*10*
Nitrobenzene-d5	*93*		*23 - 120*	*09/27/16 14:30*	*09/30/16 11:29*	*5*
2-Fluorobiphenyl (Surr)	*108*		*38 - 123*	*09/27/16 14:30*	*09/30/16 03:29*	*10*
2-Fluorobiphenyl (Surr)	*110*		*38 - 123*	*09/27/16 14:30*	*09/30/16 11:29*	*5*
p-Terphenyl-d14	*137*	*X*	*68 - 136*	*09/27/16 14:30*	*09/30/16 03:29*	*10*
p-Terphenyl-d14	*118*		*68 - 136*	*09/27/16 14:30*	*09/30/16 11:29*	*5*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		38		mg/Kg	☼	09/26/16 08:55	09/26/16 18:04	1
Diesel Range Organics (DRO) (C10-C25)	ND		96		mg/Kg	☼	09/26/16 08:55	09/26/16 18:04	1
Residual Range Organics (RRO) (C25-C36)	**640**		96		mg/Kg	☼	09/26/16 08:55	09/26/16 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*104*		*50 - 150*	*09/26/16 08:55*	*09/26/16 18:04*	*1*
n-Triacontane-d62	*119*		*50 - 150*	*09/26/16 08:55*	*09/26/16 18:04*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**10**		6.4	2.2	mg/Kg	☼	09/26/16 08:56	09/29/16 18:01	5
Barium	**87**		3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 18:01	5
Cadmium	**0.19**	**J**	3.2	0.18	mg/Kg	☼	09/26/16 08:56	09/29/16 18:01	5
Chromium	**210**		3.2	0.29	mg/Kg	☼	09/26/16 08:56	09/29/16 18:01	5
Lead	**130**		6.4	1.8	mg/Kg	☼	09/26/16 08:56	09/29/16 18:01	5
Selenium	ND		15	5.3	mg/Kg	☼	09/26/16 08:56	09/29/16 18:01	5
Silver	ND		3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 18:01	5

Client Sample ID: DP-26(1.5-2.5):092116

Lab Sample ID: 590-4572-27
Date Collected: 09/21/16 14:40
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 96.1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	85		45		ug/Kg	☼	09/29/16 09:14	09/30/16 13:18	1

Client Sample ID: DP-27(1.5-2.5):092116

Lab Sample ID: 590-4572-28
Date Collected: 09/21/16 15:00
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 95.8

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	67		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
2-Methylnaphthalene	29		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
1-Methylnaphthalene	ND		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
Acenaphthylene	1200		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
Acenaphthene	89		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
Fluorene	90		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
Phenanthrene	680		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
Anthracene	360		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
Fluoranthene	4900		260		ug/Kg	☼	09/27/16 14:30	09/30/16 10:44	10
Pyrene	6700		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
Benzo[a]anthracene	3400		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
Chrysene	3600		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
Benzo[b]fluoranthene	4000		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
Benzo[k]fluoranthene	1900		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
Benzo[a]pyrene	3500		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
Indeno[1,2,3-cd]pyrene	1100		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
Dibenz(a,h)anthracene	330		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1
Benzo[g,h,i]perylene	1100		26		ug/Kg	☼	09/27/16 14:30	09/30/16 03:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*81*		*23 - 120*	*09/27/16 14:30*	*09/30/16 03:52*	*1*
Nitrobenzene-d5	*81*		*23 - 120*	*09/27/16 14:30*	*09/30/16 10:44*	*10*
2-Fluorobiphenyl (Surr)	*82*		*38 - 123*	*09/27/16 14:30*	*09/30/16 03:52*	*1*
2-Fluorobiphenyl (Surr)	*96*		*38 - 123*	*09/27/16 14:30*	*09/30/16 10:44*	*10*
p-Terphenyl-d14	*126*		*68 - 136*	*09/27/16 14:30*	*09/30/16 03:52*	*1*
p-Terphenyl-d14	*101*		*68 - 136*	*09/27/16 14:30*	*09/30/16 10:44*	*10*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		40		mg/Kg	☼	09/26/16 08:55	09/26/16 18:22	1
Diesel Range Organics (DRO) (C10-C25)	120		99		mg/Kg	☼	09/26/16 08:55	09/26/16 18:22	1
Residual Range Organics (RRO) (C25-C36)	270		99		mg/Kg	☼	09/26/16 08:55	09/26/16 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*111*		*50 - 150*	*09/26/16 08:55*	*09/26/16 18:22*	*1*
n-Triacontane-d62	*123*		*50 - 150*	*09/26/16 08:55*	*09/26/16 18:22*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10		6.2	2.2	mg/Kg	☼	09/26/16 08:56	09/29/16 18:03	5
Barium	64		3.1	0.26	mg/Kg	☼	09/26/16 08:56	09/29/16 18:03	5

Client Sample ID: DP-27(1.5-2.5):092116

Lab Sample ID: 590-4572-28
Date Collected: 09/21/16 15:00
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 95.8

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.18**	**J**	3.1	0.17	mg/Kg	☼	09/26/16 08:56	09/29/16 18:03	5
Chromium	**16**		3.1	0.28	mg/Kg	☼	09/26/16 08:56	09/29/16 18:03	5
Lead	**70**		6.2	1.7	mg/Kg	☼	09/26/16 08:56	09/29/16 18:03	5
Selenium	ND		15	5.1	mg/Kg	☼	09/26/16 08:56	09/29/16 18:03	5
Silver	ND		3.1	0.26	mg/Kg	☼	09/26/16 08:56	09/29/16 18:03	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		47		ug/Kg	☼	09/29/16 09:14	09/30/16 13:20	1

Client Sample ID: DP-28(1-2):092116

Lab Sample ID: 590-4572-29
Date Collected: 09/21/16 15:40
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
2-Methylnaphthalene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
1-Methylnaphthalene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
Acenaphthylene	**10**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
Acenaphthene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
Fluorene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
Phenanthrene	**19**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
Anthracene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
Fluoranthene	**45**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
Pyrene	**59**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
Benzo[a]anthracene	**30**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
Chrysene	**32**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
Benzo[b]fluoranthene	**40**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
Benzo[k]fluoranthene	**15**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
Benzo[a]pyrene	**36**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
Indeno[1,2,3-cd]pyrene	**25**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
Dibenz(a,h)anthracene	ND		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1
Benzo[g,h,i]perylene	**28**		10		ug/Kg	☼	09/27/16 14:30	09/30/16 11:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*73*		*23 - 120*	*09/27/16 14:30*	*09/30/16 11:07*	*1*
2-Fluorobiphenyl (Surr)	*75*		*38 - 123*	*09/27/16 14:30*	*09/30/16 11:07*	*1*
p-Terphenyl-d14	*97*		*68 - 136*	*09/27/16 14:30*	*09/30/16 11:07*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		39		mg/Kg	☼	09/26/16 08:55	09/26/16 18:40	1
Diesel Range Organics (DRO) (C10-C25)	ND		98		mg/Kg	☼	09/26/16 08:55	09/26/16 18:40	1
Residual Range Organics (RRO) (C25-C36)	ND		98		mg/Kg	☼	09/26/16 08:55	09/26/16 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*101*		*50 - 150*	*09/26/16 08:55*	*09/26/16 18:40*	*1*
n-Triacontane-d62	*113*		*50 - 150*	*09/26/16 08:55*	*09/26/16 18:40*	*1*

Client Sample ID: DP-28(1-2):092116

Lab Sample ID: 590-4572-29
Date Collected: 09/21/16 15:40
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.1**	**J**	6.7	2.4	mg/Kg	☼	09/26/16 08:56	09/29/16 18:13	5
Barium	**410**		3.4	0.28	mg/Kg	☼	09/26/16 08:56	09/29/16 18:13	5
Cadmium	**0.29**	**J**	3.4	0.19	mg/Kg	☼	09/26/16 08:56	09/29/16 18:13	5
Chromium	**7.1**		3.4	0.31	mg/Kg	☼	09/26/16 08:56	09/29/16 18:13	5
Lead	**53**		6.7	1.9	mg/Kg	☼	09/26/16 08:56	09/29/16 18:13	5
Selenium	ND		16	5.5	mg/Kg	☼	09/26/16 08:56	09/29/16 18:13	5
Silver	ND		3.4	0.28	mg/Kg	☼	09/26/16 08:56	09/29/16 18:13	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		49		ug/Kg	☼	09/29/16 09:14	09/30/16 13:22	1

Client Sample ID: DP-29(1.5-2.5):092116

Lab Sample ID: 590-4572-30
Date Collected: 09/21/16 16:05
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 92.5

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
2-Methylnaphthalene	ND		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
1-Methylnaphthalene	ND		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
Acenaphthylene	**23**		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
Acenaphthene	ND		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
Fluorene	ND		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
Phenanthrene	**130**		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
Anthracene	**42**		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
Fluoranthene	**260**		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
Pyrene	**300**		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
Benzo[a]anthracene	**150**		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
Chrysene	**170**		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
Benzo[b]fluoranthene	**200**		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
Benzo[k]fluoranthene	**78**		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
Benzo[a]pyrene	**160**		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
Indeno[1,2,3-cd]pyrene	**65**		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
Dibenz(a,h)anthracene	**27**		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2
Benzo[g,h,i]perylene	**79**		21		ug/Kg	☼	09/29/16 10:42	09/29/16 18:01	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*85*		*23 - 120*	*09/29/16 10:42*	*09/29/16 18:01*	*2*
2-Fluorobiphenyl (Surr)	*97*		*38 - 123*	*09/29/16 10:42*	*09/29/16 18:01*	*2*
p-Terphenyl-d14	*103*		*68 - 136*	*09/29/16 10:42*	*09/29/16 18:01*	*2*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		42		mg/Kg	☼	09/26/16 08:55	09/26/16 18:58	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg	☼	09/26/16 08:55	09/26/16 18:58	1
Residual Range Organics (RRO) (C25-C36)	**180**		100		mg/Kg	☼	09/26/16 08:55	09/26/16 18:58	1

Client Sample ID: DP-29(1.5-2.5):092116

Lab Sample ID: 590-4572-30
Date Collected: 09/21/16 16:05
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 92.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	*102*		*50 - 150*	*09/26/16 08:55*	*09/26/16 18:58*	*1*
n-Triacontane-d62	*113*		*50 - 150*	*09/26/16 08:55*	*09/26/16 18:58*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**11**		6.8	2.4	mg/Kg	☼	09/26/16 08:56	09/29/16 18:16	5
Barium	**64**		3.4	0.29	mg/Kg	☼	09/26/16 08:56	09/29/16 18:16	5
Cadmium	**0.20**	**J**	3.4	0.19	mg/Kg	☼	09/26/16 08:56	09/29/16 18:16	5
Chromium	**11**		3.4	0.31	mg/Kg	☼	09/26/16 08:56	09/29/16 18:16	5
Lead	**66**		6.8	1.9	mg/Kg	☼	09/26/16 08:56	09/29/16 18:16	5
Selenium	ND		16	5.6	mg/Kg	☼	09/26/16 08:56	09/29/16 18:16	5
Silver	ND		3.4	0.29	mg/Kg	☼	09/26/16 08:56	09/29/16 18:16	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**130**		46		ug/Kg	☼	09/29/16 09:14	09/30/16 13:29	1

Client Sample ID: DP-29(10-11):092116

Lab Sample ID: 590-4572-31
Date Collected: 09/21/16 16:10
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.8

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
2-Methylnaphthalene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
1-Methylnaphthalene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
Acenaphthylene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
Acenaphthene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
Fluorene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
Phenanthrene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
Anthracene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
Fluoranthene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
Pyrene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
Benzo[a]anthracene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
Chrysene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
Benzo[b]fluoranthene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
Benzo[k]fluoranthene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
Benzo[a]pyrene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
Indeno[1,2,3-cd]pyrene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
Dibenz(a,h)anthracene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1
Benzo[g,h,i]perylene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 18:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*74*		*23 - 120*	*09/29/16 10:42*	*09/29/16 18:24*	*1*
2-Fluorobiphenyl (Surr)	*76*		*38 - 123*	*09/29/16 10:42*	*09/29/16 18:24*	*1*
p-Terphenyl-d14	*100*		*68 - 136*	*09/29/16 10:42*	*09/29/16 18:24*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		41		mg/Kg	☼	09/26/16 08:55	09/26/16 19:16	1

Client Sample ID: DP-29(10-11):092116

Lab Sample ID: 590-4572-31
Date Collected: 09/21/16 16:10
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.8

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg	☼	09/26/16 08:55	09/26/16 19:16	1
Residual Range Organics (RRO) (C25-C36)	ND		100		mg/Kg	☼	09/26/16 08:55	09/26/16 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*103*		*50 - 150*	*09/26/16 08:55*	*09/26/16 19:16*	*1*
n-Triacontane-d62	*113*		*50 - 150*	*09/26/16 08:55*	*09/26/16 19:16*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**13**		6.6	2.3	mg/Kg	☼	09/26/16 08:56	09/29/16 18:18	5
Barium	**59**		3.3	0.28	mg/Kg	☼	09/26/16 08:56	09/29/16 18:18	5
Cadmium	ND		3.3	0.18	mg/Kg	☼	09/26/16 08:56	09/29/16 18:18	5
Chromium	**11**		3.3	0.30	mg/Kg	☼	09/26/16 08:56	09/29/16 18:18	5
Lead	**12**		6.6	1.8	mg/Kg	☼	09/26/16 08:56	09/29/16 18:18	5
Selenium	ND		16	5.4	mg/Kg	☼	09/26/16 08:56	09/29/16 18:18	5
Silver	ND		3.3	0.28	mg/Kg	☼	09/26/16 08:56	09/29/16 18:18	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND	F2	49		ug/Kg	☼	09/29/16 09:17	09/30/16 13:36	1

Client Sample ID: DP-30(1.5-2.5):092116

Lab Sample ID: 590-4572-32
Date Collected: 09/21/16 16:30
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 96.5

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		51		ug/Kg	☼	09/29/16 10:42	09/30/16 14:33	1
2-Methylnaphthalene	ND		51		ug/Kg	☼	09/29/16 10:42	09/30/16 14:33	1
1-Methylnaphthalene	ND		51		ug/Kg	☼	09/29/16 10:42	09/30/16 14:33	1
Acenaphthylene	ND		51		ug/Kg	☼	09/29/16 10:42	09/30/16 14:33	1
Acenaphthene	ND		51		ug/Kg	☼	09/29/16 10:42	09/30/16 14:33	1
Fluorene	ND		51		ug/Kg	☼	09/29/16 10:42	09/30/16 14:33	1
Phenanthrene	ND		51		ug/Kg	☼	09/29/16 10:42	09/30/16 14:33	1
Anthracene	ND		51		ug/Kg	☼	09/29/16 10:42	09/30/16 14:33	1
Fluoranthene	**53**		51		ug/Kg	☼	09/29/16 10:42	09/30/16 14:33	1
Pyrene	**94**		51		ug/Kg	☼	09/29/16 10:42	09/30/16 14:33	1
Benzo[a]anthracene	ND		51		ug/Kg	☼	09/29/16 10:42	09/30/16 14:33	1
Chrysene	**60**		51		ug/Kg	☼	09/29/16 10:42	09/30/16 14:33	1
Benzo[b]fluoranthene	ND		260		ug/Kg	☼	09/29/16 10:42	09/29/16 18:46	5
Benzo[k]fluoranthene	ND		260		ug/Kg	☼	09/29/16 10:42	09/29/16 18:46	5
Benzo[a]pyrene	ND		260		ug/Kg	☼	09/29/16 10:42	09/29/16 18:46	5
Indeno[1,2,3-cd]pyrene	ND		260		ug/Kg	☼	09/29/16 10:42	09/29/16 18:46	5
Dibenz(a,h)anthracene	ND		260		ug/Kg	☼	09/29/16 10:42	09/29/16 18:46	5
Benzo[g,h,i]perylene	ND		260		ug/Kg	☼	09/29/16 10:42	09/29/16 18:46	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*79*		*23 - 120*	*09/29/16 10:42*	*09/29/16 18:46*	*5*
Nitrobenzene-d5	*55*		*23 - 120*	*09/29/16 10:42*	*09/30/16 14:33*	*1*

Client Sample ID: DP-30(1.5-2.5):092116

Lab Sample ID: 590-4572-32
Date Collected: 09/21/16 16:30
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 96.5

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	*95*		*38 - 123*	*09/29/16 10:42*	*09/29/16 18:46*	*5*
2-Fluorobiphenyl (Surr)	*88*		*38 - 123*	*09/29/16 10:42*	*09/30/16 14:33*	*1*
p-Terphenyl-d14	*101*		*68 - 136*	*09/29/16 10:42*	*09/29/16 18:46*	*5*
p-Terphenyl-d14	*130*		*68 - 136*	*09/29/16 10:42*	*09/30/16 14:33*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		78		mg/Kg	☼	09/26/16 08:55	09/26/16 19:34	2
Diesel Range Organics (DRO) (C10-C25)	ND		200		mg/Kg	☼	09/26/16 08:55	09/26/16 19:34	2
Residual Range Organics (RRO) (C25-C36)	**820**		200		mg/Kg	☼	09/26/16 08:55	09/26/16 19:34	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	*101*		*50 - 150*	*09/26/16 08:55*	*09/26/16 19:34*	*2*
n-Triacontane-d62	*97*		*50 - 150*	*09/26/16 08:55*	*09/26/16 19:34*	*2*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**10**		6.5	2.3	mg/Kg	☼	09/26/16 08:56	09/29/16 18:20	5
Barium	**59**		3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 18:20	5
Cadmium	ND		3.2	0.18	mg/Kg	☼	09/26/16 08:56	09/29/16 18:20	5
Chromium	**10**		3.2	0.30	mg/Kg	☼	09/26/16 08:56	09/29/16 18:20	5
Lead	**17**		6.5	1.8	mg/Kg	☼	09/26/16 08:56	09/29/16 18:20	5
Selenium	ND		16	5.3	mg/Kg	☼	09/26/16 08:56	09/29/16 18:20	5
Silver	ND		3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 18:20	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**110**		46		ug/Kg	☼	09/29/16 09:17	09/30/16 13:48	1

Client Sample ID: DP-31(2-3):092216

Lab Sample ID: 590-4572-33
Date Collected: 09/22/16 08:30
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 92.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
2-Methylnaphthalene	**11**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
1-Methylnaphthalene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
Acenaphthylene	**21**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
Acenaphthene	**14**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
Fluorene	**13**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
Phenanthrene	**180**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
Anthracene	**51**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
Fluoranthene	**310**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
Pyrene	**320**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
Benzo[a]anthracene	**160**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
Chrysene	**180**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
Benzo[b]fluoranthene	**290**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
Benzo[k]fluoranthene	**95**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1

Client Sample ID: DP-31(2-3):092216

Lab Sample ID: 590-4572-33
Date Collected: 09/22/16 08:30
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 92.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**190**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
Indeno[1,2,3-cd]pyrene	**93**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
Dibenz(a,h)anthracene	**30**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1
Benzo[g,h,i]perylene	**90**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*70*		*23 - 120*	*09/29/16 10:42*	*09/29/16 19:09*	*1*
2-Fluorobiphenyl (Surr)	*66*		*38 - 123*	*09/29/16 10:42*	*09/29/16 19:09*	*1*
p-Terphenyl-d14	*83*		*68 - 136*	*09/29/16 10:42*	*09/29/16 19:09*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		41		mg/Kg	☼	09/26/16 08:55	09/26/16 19:52	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg	☼	09/26/16 08:55	09/26/16 19:52	1
Residual Range Organics (RRO) (C25-C36)	**120**		100		mg/Kg	☼	09/26/16 08:55	09/26/16 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*105*		*50 - 150*	*09/26/16 08:55*	*09/26/16 19:52*	*1*
n-Triacontane-d62	*117*		*50 - 150*	*09/26/16 08:55*	*09/26/16 19:52*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.3**		6.5	2.3	mg/Kg	☼	09/26/16 08:56	09/29/16 18:23	5
Barium	**110**		3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 18:23	5
Cadmium	**0.24**	**J**	3.2	0.18	mg/Kg	☼	09/26/16 08:56	09/29/16 18:23	5
Chromium	**11**		3.2	0.30	mg/Kg	☼	09/26/16 08:56	09/29/16 18:23	5
Lead	**64**		6.5	1.8	mg/Kg	☼	09/26/16 08:56	09/29/16 18:23	5
Selenium	ND		16	5.3	mg/Kg	☼	09/26/16 08:56	09/29/16 18:23	5
Silver	**0.32**	**J B**	3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 18:23	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**250**		47		ug/Kg	☼	09/29/16 09:17	09/30/16 13:50	1

Client Sample ID: DP-32(1.5-2.5):092216

Lab Sample ID: 590-4572-34
Date Collected: 09/22/16 09:30
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 95.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		39		ug/Kg	☼	09/29/16 10:42	09/30/16 14:55	1
2-Methylnaphthalene	ND		39		ug/Kg	☼	09/29/16 10:42	09/30/16 14:55	1
1-Methylnaphthalene	ND		39		ug/Kg	☼	09/29/16 10:42	09/30/16 14:55	1
Acenaphthylene	ND		39		ug/Kg	☼	09/29/16 10:42	09/30/16 14:55	1
Acenaphthene	ND		39		ug/Kg	☼	09/29/16 10:42	09/30/16 14:55	1
Fluorene	ND		39		ug/Kg	☼	09/29/16 10:42	09/30/16 14:55	1
Phenanthrene	**95**		39		ug/Kg	☼	09/29/16 10:42	09/30/16 14:55	1
Anthracene	ND		39		ug/Kg	☼	09/29/16 10:42	09/30/16 14:55	1
Fluoranthene	**110**		39		ug/Kg	☼	09/29/16 10:42	09/30/16 14:55	1

Client Sample ID: DP-32(1.5-2.5):092216

Date Collected: 09/22/16 09:30
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-34

Matrix: Solid
Percent Solids: 95.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	**190**		39		ug/Kg	☼	09/29/16 10:42	09/30/16 14:55	1
Benzo[a]anthracene	**65**		39		ug/Kg	☼	09/29/16 10:42	09/30/16 14:55	1
Chrysene	**71**		39		ug/Kg	☼	09/29/16 10:42	09/30/16 14:55	1
Benzo[b]fluoranthene	ND		780		ug/Kg	☼	09/29/16 10:42	09/29/16 19:32	20
Benzo[k]fluoranthene	ND		780		ug/Kg	☼	09/29/16 10:42	09/29/16 19:32	20
Benzo[a]pyrene	ND		780		ug/Kg	☼	09/29/16 10:42	09/29/16 19:32	20
Indeno[1,2,3-cd]pyrene	ND		780		ug/Kg	☼	09/29/16 10:42	09/29/16 19:32	20
Dibenz(a,h)anthracene	ND		780		ug/Kg	☼	09/29/16 10:42	09/29/16 19:32	20
Benzo[g,h,i]perylene	ND		780		ug/Kg	☼	09/29/16 10:42	09/29/16 19:32	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*83*		*23 - 120*	*09/29/16 10:42*	*09/29/16 19:32*	*20*
Nitrobenzene-d5	*53*		*23 - 120*	*09/29/16 10:42*	*09/30/16 14:55*	*1*
2-Fluorobiphenyl (Surr)	*101*		*38 - 123*	*09/29/16 10:42*	*09/29/16 19:32*	*20*
2-Fluorobiphenyl (Surr)	*77*		*38 - 123*	*09/29/16 10:42*	*09/30/16 14:55*	*1*
p-Terphenyl-d14	*114*		*68 - 136*	*09/29/16 10:42*	*09/29/16 19:32*	*20*
p-Terphenyl-d14	*123*		*68 - 136*	*09/29/16 10:42*	*09/30/16 14:55*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		41		mg/Kg	☼	09/26/16 09:09	09/26/16 21:22	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg	☼	09/26/16 09:09	09/26/16 21:22	1
Residual Range Organics (RRO) (C25-C36)	**340**		100		mg/Kg	☼	09/26/16 09:09	09/26/16 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*50 - 150*	*09/26/16 09:09*	*09/26/16 21:22*	*1*
n-Triacontane-d62	*101*		*50 - 150*	*09/26/16 09:09*	*09/26/16 21:22*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.7**		6.5	2.3	mg/Kg	☼	09/26/16 08:56	09/29/16 18:25	5
Barium	**96**		3.3	0.28	mg/Kg	☼	09/26/16 08:56	09/29/16 18:25	5
Cadmium	**1.1**	**J**	3.3	0.18	mg/Kg	☼	09/26/16 08:56	09/29/16 18:25	5
Chromium	**11**		3.3	0.30	mg/Kg	☼	09/26/16 08:56	09/29/16 18:25	5
Lead	**300**		6.5	1.8	mg/Kg	☼	09/26/16 08:56	09/29/16 18:25	5
Selenium	ND		16	5.4	mg/Kg	☼	09/26/16 08:56	09/29/16 18:25	5
Silver	**0.45**	**J B**	3.3	0.28	mg/Kg	☼	09/26/16 08:56	09/29/16 18:25	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**100**		49		ug/Kg	☼	09/29/16 09:17	09/30/16 13:57	1

Client Sample ID: DP-33(1-2):092216

Date Collected: 09/22/16 09:55
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-35

Matrix: Solid
Percent Solids: 96.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1

Client Sample ID: DP-33(1-2):092216
Date Collected: 09/22/16 09:55
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-35
Matrix: Solid
Percent Solids: 96.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**11**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
1-Methylnaphthalene	ND		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
Acenaphthylene	**14**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
Acenaphthene	ND		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
Fluorene	ND		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
Phenanthrene	**73**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
Anthracene	**23**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
Fluoranthene	**170**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
Pyrene	**170**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
Benzo[a]anthracene	**95**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
Chrysene	**100**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
Benzo[b]fluoranthene	**140**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
Benzo[k]fluoranthene	**54**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
Benzo[a]pyrene	**99**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
Indeno[1,2,3-cd]pyrene	**46**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
Dibenz(a,h)anthracene	**16**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1
Benzo[g,h,i]perylene	**46**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*70*		*23 - 120*	*09/29/16 10:42*	*09/29/16 19:54*	*1*
2-Fluorobiphenyl (Surr)	*76*		*38 - 123*	*09/29/16 10:42*	*09/29/16 19:54*	*1*
p-Terphenyl-d14	*97*		*68 - 136*	*09/29/16 10:42*	*09/29/16 19:54*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		40		mg/Kg	☼	09/26/16 09:09	09/26/16 21:58	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg	☼	09/26/16 09:09	09/26/16 21:58	1
Residual Range Organics (RRO) (C25-C36)	**150**		100		mg/Kg	☼	09/26/16 09:09	09/26/16 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*98*		*50 - 150*	*09/26/16 09:09*	*09/26/16 21:58*	*1*
n-Triacontane-d62	*102*		*50 - 150*	*09/26/16 09:09*	*09/26/16 21:58*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.3**		6.4	2.2	mg/Kg	☼	09/26/16 08:56	09/29/16 18:27	5
Barium	**170**		3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 18:27	5
Cadmium	**0.71**	**J**	3.2	0.18	mg/Kg	☼	09/26/16 08:56	09/29/16 18:27	5
Chromium	**16**		3.2	0.29	mg/Kg	☼	09/26/16 08:56	09/29/16 18:27	5
Lead	**210**		6.4	1.8	mg/Kg	☼	09/26/16 08:56	09/29/16 18:27	5
Selenium	ND		15	5.2	mg/Kg	☼	09/26/16 08:56	09/29/16 18:27	5
Silver	ND		3.2	0.27	mg/Kg	☼	09/26/16 08:56	09/29/16 18:27	5

Method: 7471B - Mercury (CVAA) - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**190**		46		ug/Kg	☼	09/29/16 09:17	09/30/16 14:00	1

Client Sample ID: DP-34(1.5-2.5):092216
Date Collected: 09/22/16 10:00
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-36
Matrix: Solid
Percent Solids: 94.6

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
2-Methylnaphthalene	ND		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
1-Methylnaphthalene	ND		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
Acenaphthylene	**45**		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
Acenaphthene	**42**		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
Fluorene	**40**		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
Phenanthrene	**580**		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
Anthracene	**150**		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
Fluoranthene	**940**		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
Pyrene	**980**		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
Benzo[a]anthracene	**510**		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
Chrysene	**550**		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
Benzo[b]fluoranthene	**590**		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
Benzo[k]fluoranthene	**270**		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
Benzo[a]pyrene	**500**		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
Indeno[1,2,3-cd]pyrene	**200**		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
Dibenz(a,h)anthracene	**68**		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1
Benzo[g,h,i]perylene	**180**		26		ug/Kg	☼	09/29/16 10:42	09/29/16 20:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*77*		*23 - 120*	*09/29/16 10:42*	*09/29/16 20:17*	*1*
2-Fluorobiphenyl (Surr)	*86*		*38 - 123*	*09/29/16 10:42*	*09/29/16 20:17*	*1*
p-Terphenyl-d14	*100*		*68 - 136*	*09/29/16 10:42*	*09/29/16 20:17*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		41		mg/Kg	☼	09/26/16 09:09	09/26/16 22:34	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg	☼	09/26/16 09:09	09/26/16 22:34	1
Residual Range Organics (RRO) (C25-C36)	**470**		100		mg/Kg	☼	09/26/16 09:09	09/26/16 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*106*		*50 - 150*	*09/26/16 09:09*	*09/26/16 22:34*	*1*
n-Triacontane-d62	*105*		*50 - 150*	*09/26/16 09:09*	*09/26/16 22:34*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.9**		6.5	2.3	mg/Kg	☼	09/26/16 08:56	09/29/16 18:30	5
Barium	**88**		3.3	0.28	mg/Kg	☼	09/26/16 08:56	09/29/16 18:30	5
Cadmium	**0.48**	**J**	3.3	0.18	mg/Kg	☼	09/26/16 08:56	09/29/16 18:30	5
Chromium	**11**		3.3	0.30	mg/Kg	☼	09/26/16 08:56	09/29/16 18:30	5
Lead	**180**		6.5	1.8	mg/Kg	☼	09/26/16 08:56	09/29/16 18:30	5
Selenium	ND		16	5.4	mg/Kg	☼	09/26/16 08:56	09/29/16 18:30	5
Silver	ND		3.3	0.28	mg/Kg	☼	09/26/16 08:56	09/29/16 18:30	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**130**		45		ug/Kg	☼	09/29/16 09:17	09/30/16 14:02	1

Client Sample ID: DP-35(1.5-2.5):092216
Date Collected: 09/22/16 11:20
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-37
Matrix: Solid
Percent Solids: 93.1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:18	1
2-Methylnaphthalene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:18	1
1-Methylnaphthalene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:18	1
Acenaphthylene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:18	1
Acenaphthene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:18	1
Fluorene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:18	1
Phenanthrene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:18	1
Anthracene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:18	1
Fluoranthene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:18	1
Pyrene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:18	1
Benzo[a]anthracene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:18	1
Chrysene	**71**		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:18	1
Benzo[b]fluoranthene	ND		1300		ug/Kg	☼	09/29/16 10:42	09/29/16 20:40	20
Benzo[k]fluoranthene	ND		1300		ug/Kg	☼	09/29/16 10:42	09/29/16 20:40	20
Benzo[a]pyrene	ND		1300		ug/Kg	☼	09/29/16 10:42	09/29/16 20:40	20
Indeno[1,2,3-cd]pyrene	ND		1300		ug/Kg	☼	09/29/16 10:42	09/29/16 20:40	20
Dibenz(a,h)anthracene	ND		1300		ug/Kg	☼	09/29/16 10:42	09/29/16 20:40	20
Benzo[g,h,i]perylene	ND		1300		ug/Kg	☼	09/29/16 10:42	09/29/16 20:40	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*71*		*23 - 120*	*09/29/16 10:42*	*09/29/16 20:40*	*20*
Nitrobenzene-d5	*50*		*23 - 120*	*09/29/16 10:42*	*09/30/16 15:18*	*1*
2-Fluorobiphenyl (Surr)	*91*		*38 - 123*	*09/29/16 10:42*	*09/29/16 20:40*	*20*
2-Fluorobiphenyl (Surr)	*72*		*38 - 123*	*09/29/16 10:42*	*09/30/16 15:18*	*1*
p-Terphenyl-d14	*96*		*68 - 136*	*09/29/16 10:42*	*09/29/16 20:40*	*20*
p-Terphenyl-d14	*138*	*X*	*68 - 136*	*09/29/16 10:42*	*09/30/16 15:18*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		41		mg/Kg	☼	09/26/16 09:09	09/26/16 22:52	1
Diesel Range Organics (DRO) (C10-C25)	**160**		100		mg/Kg	☼	09/26/16 09:09	09/26/16 22:52	1
Residual Range Organics (RRO) (C25-C36)	**2600**		100		mg/Kg	☼	09/26/16 09:09	09/26/16 22:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*50 - 150*	*09/26/16 09:09*	*09/26/16 22:52*	*1*
n-Triacontane-d62	*85*		*50 - 150*	*09/26/16 09:09*	*09/26/16 22:52*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.9**		6.7	2.4	mg/Kg	☼	09/26/16 08:58	09/30/16 11:17	5
Barium	**53**		3.4	0.28	mg/Kg	☼	09/26/16 08:58	09/30/16 11:17	5
Cadmium	ND		3.4	0.19	mg/Kg	☼	09/26/16 08:58	09/30/16 11:17	5
Chromium	**5.9**		3.4	0.31	mg/Kg	☼	09/26/16 08:58	09/30/16 11:17	5
Lead	**12**	**B**	6.7	1.9	mg/Kg	☼	09/26/16 08:58	09/30/16 11:17	5
Selenium	ND		16	5.5	mg/Kg	☼	09/26/16 08:58	09/30/16 11:17	5
Silver	**0.24**	**J**	2.3	0.19	mg/Kg	☼	09/30/16 16:19	10/03/16 14:28	5

Client Sample ID: DP-35(1.5-2.5):092216

Lab Sample ID: 590-4572-37
Date Collected: 09/22/16 11:20
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		47		ug/Kg	☼	09/29/16 09:17	09/30/16 14:04	1

Client Sample ID: DP-35(10-11):092216

Lab Sample ID: 590-4572-38
Date Collected: 09/22/16 11:25
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 89.5

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**16**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
2-Methylnaphthalene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
1-Methylnaphthalene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
Acenaphthylene	**33**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
Acenaphthene	**12**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
Fluorene	**30**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
Phenanthrene	**310**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
Anthracene	**61**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
Fluoranthene	**600**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
Pyrene	**580**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
Benzo[a]anthracene	**260**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
Chrysene	**290**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
Benzo[b]fluoranthene	**340**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
Benzo[k]fluoranthene	**170**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
Benzo[a]pyrene	**260**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
Indeno[1,2,3-cd]pyrene	**97**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
Dibenz(a,h)anthracene	**34**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1
Benzo[g,h,i]perylene	**96**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*		*23 - 120*	*09/29/16 10:42*	*09/29/16 21:03*	*1*
2-Fluorobiphenyl (Surr)	*89*		*38 - 123*	*09/29/16 10:42*	*09/29/16 21:03*	*1*
p-Terphenyl-d14	*97*		*68 - 136*	*09/29/16 10:42*	*09/29/16 21:03*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		42		mg/Kg	☼	09/26/16 09:09	09/26/16 21:04	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg	☼	09/26/16 09:09	09/26/16 21:04	1
Residual Range Organics (RRO) (C25-C36)	ND		100		mg/Kg	☼	09/26/16 09:09	09/26/16 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*92*		*50 - 150*	*09/26/16 09:09*	*09/26/16 21:04*	*1*
n-Triacontane-d62	*93*		*50 - 150*	*09/26/16 09:09*	*09/26/16 21:04*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.7**	**J**	6.9	2.4	mg/Kg	☼	09/26/16 08:58	09/30/16 11:28	5
Barium	**140**		3.5	0.29	mg/Kg	☼	09/26/16 08:58	09/30/16 11:28	5
Cadmium	ND		3.5	0.19	mg/Kg	☼	09/26/16 08:58	09/30/16 11:28	5
Chromium	**7.2**		3.5	0.32	mg/Kg	☼	09/26/16 08:58	09/30/16 11:28	5
Lead	**30**	**B**	6.9	1.9	mg/Kg	☼	09/26/16 08:58	09/30/16 11:28	5

Client Sample ID: DP-35(10-11):092216

Lab Sample ID: 590-4572-38
Date Collected: 09/22/16 11:25
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 89.5

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		17	5.7	mg/Kg	☼	09/26/16 08:58	09/30/16 11:28	5
Silver	ND		2.3	0.20	mg/Kg	☼	09/30/16 16:19	10/04/16 16:35	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**170**		44		ug/Kg	☼	09/29/16 09:17	09/30/16 14:07	1

Client Sample ID: DP-36(2-3):092216

Lab Sample ID: 590-4572-39
Date Collected: 09/22/16 11:50
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:41	1
2-Methylnaphthalene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:41	1
1-Methylnaphthalene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:41	1
Acenaphthylene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:41	1
Acenaphthene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:41	1
Fluorene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:41	1
Phenanthrene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:41	1
Anthracene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:41	1
Fluoranthene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:41	1
Pyrene	**70**		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:41	1
Benzo[a]anthracene	ND		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:41	1
Chrysene	**95**		63		ug/Kg	☼	09/29/16 10:42	09/30/16 15:41	1
Benzo[b]fluoranthene	ND		630		ug/Kg	☼	09/29/16 10:42	09/29/16 21:25	10
Benzo[k]fluoranthene	ND		630		ug/Kg	☼	09/29/16 10:42	09/29/16 21:25	10
Benzo[a]pyrene	ND		630		ug/Kg	☼	09/29/16 10:42	09/29/16 21:25	10
Indeno[1,2,3-cd]pyrene	ND		630		ug/Kg	☼	09/29/16 10:42	09/29/16 21:25	10
Dibenz(a,h)anthracene	ND		630		ug/Kg	☼	09/29/16 10:42	09/29/16 21:25	10
Benzo[g,h,i]perylene	ND		630		ug/Kg	☼	09/29/16 10:42	09/29/16 21:25	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92*		*23 - 120*	*09/29/16 10:42*	*09/29/16 21:25*	*10*
Nitrobenzene-d5	*60*		*23 - 120*	*09/29/16 10:42*	*09/30/16 15:41*	*1*
2-Fluorobiphenyl (Surr)	*82*		*38 - 123*	*09/29/16 10:42*	*09/29/16 21:25*	*10*
2-Fluorobiphenyl (Surr)	*84*		*38 - 123*	*09/29/16 10:42*	*09/30/16 15:41*	*1*
p-Terphenyl-d14	*99*		*68 - 136*	*09/29/16 10:42*	*09/29/16 21:25*	*10*
p-Terphenyl-d14	*147*	*X*	*68 - 136*	*09/29/16 10:42*	*09/30/16 15:41*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		39		mg/Kg	☼	09/26/16 09:09	09/26/16 21:22	1
Diesel Range Organics (DRO) (C10-C25)	**150**		98		mg/Kg	☼	09/26/16 09:09	09/26/16 21:22	1
Residual Range Organics (RRO) (C25-C36)	**1900**		98		mg/Kg	☼	09/26/16 09:09	09/26/16 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*90*		*50 - 150*	*09/26/16 09:09*	*09/26/16 21:22*	*1*
n-Triacontane-d62	*79*		*50 - 150*	*09/26/16 09:09*	*09/26/16 21:22*	*1*

Client Sample ID: DP-36(2-3):092216

Lab Sample ID: 590-4572-39
Date Collected: 09/22/16 11:50
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.0

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.1**		6.6	2.3	mg/Kg	☼	09/26/16 08:58	09/30/16 11:31	5
Barium	**50**		3.3	0.28	mg/Kg	☼	09/26/16 08:58	09/30/16 11:31	5
Cadmium	ND		3.3	0.18	mg/Kg	☼	09/26/16 08:58	09/30/16 11:31	5
Chromium	**6.2**		3.3	0.30	mg/Kg	☼	09/26/16 08:58	09/30/16 11:31	5
Lead	**46**	**B**	6.6	1.8	mg/Kg	☼	09/26/16 08:58	09/30/16 11:31	5
Selenium	ND		16	5.4	mg/Kg	☼	09/26/16 08:58	09/30/16 11:31	5
Silver	ND		2.2	0.19	mg/Kg	☼	09/30/16 16:19	10/04/16 16:38	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		44		ug/Kg	☼	09/29/16 09:17	09/30/16 14:09	1

Client Sample ID: DP-37(10-11):092216

Lab Sample ID: 590-4572-40
Date Collected: 09/22/16 12:00
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 90.4

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
2-Methylnaphthalene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
1-Methylnaphthalene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
Acenaphthylene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
Acenaphthene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
Fluorene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
Phenanthrene	**40**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
Anthracene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
Fluoranthene	**72**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
Pyrene	**71**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
Benzo[a]anthracene	**39**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
Chrysene	**39**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
Benzo[b]fluoranthene	**63**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
Benzo[k]fluoranthene	**25**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
Benzo[a]pyrene	**53**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
Indeno[1,2,3-cd]pyrene	**24**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
Dibenz(a,h)anthracene	ND		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1
Benzo[g,h,i]perylene	**24**		11		ug/Kg	☼	09/29/16 10:42	09/29/16 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92*		*23 - 120*	*09/29/16 10:42*	*09/29/16 21:48*	*1*
2-Fluorobiphenyl (Surr)	*82*		*38 - 123*	*09/29/16 10:42*	*09/29/16 21:48*	*1*
p-Terphenyl-d14	*116*		*68 - 136*	*09/29/16 10:42*	*09/29/16 21:48*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		42		mg/Kg	☼	09/26/16 09:09	09/26/16 21:40	1
Diesel Range Organics (DRO) (C10-C25)	ND		110		mg/Kg	☼	09/26/16 09:09	09/26/16 21:40	1
Residual Range Organics (RRO) (C25-C36)	ND		110		mg/Kg	☼	09/26/16 09:09	09/26/16 21:40	1

Client Sample ID: DP-37(10-11):092216

Lab Sample ID: 590-4572-40
Date Collected: 09/22/16 12:00
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 90.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	94		50 - 150	09/26/16 09:09	09/26/16 21:40	1
n-Triacontane-d62	95		50 - 150	09/26/16 09:09	09/26/16 21:40	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.5**		6.5	2.3	mg/Kg	☼	09/26/16 08:58	09/30/16 11:41	5
Barium	**93**		3.3	0.28	mg/Kg	☼	09/26/16 08:58	09/30/16 11:41	5
Cadmium	ND		3.3	0.18	mg/Kg	☼	09/26/16 08:58	09/30/16 11:41	5
Chromium	**9.6**		3.3	0.30	mg/Kg	☼	09/26/16 08:58	09/30/16 11:41	5
Lead	**24**	**B**	6.5	1.8	mg/Kg	☼	09/26/16 08:58	09/30/16 11:41	5
Selenium	ND		16	5.4	mg/Kg	☼	09/26/16 08:58	09/30/16 11:41	5
Silver	ND		2.3	0.19	mg/Kg	☼	09/30/16 16:19	10/04/16 16:41	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		46		ug/Kg	☼	09/29/16 09:17	09/30/16 14:11	1

Client Sample ID: DP-38(2-3):092216

Lab Sample ID: 590-4572-41
Date Collected: 09/22/16 13:25
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 90.9

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**33**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
2-Methylnaphthalene	**50**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
1-Methylnaphthalene	**28**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
Acenaphthylene	**27**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
Acenaphthene	ND		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
Fluorene	ND		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
Phenanthrene	**130**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
Anthracene	**52**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
Fluoranthene	**210**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
Pyrene	**250**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
Benzo[a]anthracene	**96**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
Chrysene	**130**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
Benzo[b]fluoranthene	**180**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
Benzo[k]fluoranthene	**58**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
Benzo[a]pyrene	**110**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
Indeno[1,2,3-cd]pyrene	**68**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
Dibenz(a,h)anthracene	ND		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1
Benzo[g,h,i]perylene	**80**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	81		23 - 120	09/29/16 10:42	09/29/16 22:11	1
2-Fluorobiphenyl (Surr)	96		38 - 123	09/29/16 10:42	09/29/16 22:11	1
p-Terphenyl-d14	122		68 - 136	09/29/16 10:42	09/29/16 22:11	1

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		43		mg/Kg	☼	09/26/16 09:09	09/26/16 21:58	1

Client Sample ID: DP-38(2-3):092216

Lab Sample ID: 590-4572-41

Date Collected: 09/22/16 13:25

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 90.9

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		110		mg/Kg	☼	09/26/16 09:09	09/26/16 21:58	1
Residual Range Organics (RRO) (C25-C36)	**240**		110		mg/Kg	☼	09/26/16 09:09	09/26/16 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*94*		*50 - 150*	*09/26/16 09:09*	*09/26/16 21:58*	*1*
n-Triacontane-d62	*104*		*50 - 150*	*09/26/16 09:09*	*09/26/16 21:58*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**18**		6.7	2.4	mg/Kg	☼	09/26/16 08:58	09/30/16 11:43	5
Barium	**73**		3.4	0.29	mg/Kg	☼	09/26/16 08:58	09/30/16 11:43	5
Cadmium	**15**		3.4	0.19	mg/Kg	☼	09/26/16 08:58	09/30/16 11:43	5
Chromium	**9.2**		3.4	0.31	mg/Kg	☼	09/26/16 08:58	09/30/16 11:43	5
Lead	**1800**	**B**	6.7	1.9	mg/Kg	☼	09/26/16 08:58	09/30/16 11:43	5
Selenium	ND		16	5.6	mg/Kg	☼	09/26/16 08:58	09/30/16 11:43	5
Silver	**3.2**		2.6	0.22	mg/Kg	☼	09/30/16 16:19	10/04/16 16:44	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**190**		45		ug/Kg	☼	09/29/16 09:17	09/30/16 14:14	1

Client Sample ID: DP-38(6-7):092216

Lab Sample ID: 590-4572-42

Date Collected: 09/22/16 13:30

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 90.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**39**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
2-Methylnaphthalene	**52**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
1-Methylnaphthalene	**38**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
Acenaphthylene	**54**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
Acenaphthene	**160**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
Fluorene	**360**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
Phenanthrene	**260**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
Anthracene	**370**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
Fluoranthene	**630**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
Pyrene	**1100**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
Benzo[a]anthracene	**400**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
Chrysene	**610**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
Benzo[b]fluoranthene	**450**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
Benzo[k]fluoranthene	**140**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
Benzo[a]pyrene	**360**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
Indeno[1,2,3-cd]pyrene	**120**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
Dibenz(a,h)anthracene	**42**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1
Benzo[g,h,i]perylene	**150**		27		ug/Kg	☼	09/29/16 10:42	09/29/16 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*83*		*23 - 120*	*09/29/16 10:42*	*09/29/16 22:34*	*1*
2-Fluorobiphenyl (Surr)	*102*		*38 - 123*	*09/29/16 10:42*	*09/29/16 22:34*	*1*

Client Sample ID: DP-38(6-7):092216

Lab Sample ID: 590-4572-42
Date Collected: 09/22/16 13:30
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 90.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	*116*		*68 - 136*	*09/29/16 10:42*	*09/29/16 22:34*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		41		mg/Kg	☼	09/26/16 09:09	09/26/16 22:16	1
Diesel Range Organics (DRO) (C10-C25)	**150**		100		mg/Kg	☼	09/26/16 09:09	09/26/16 22:16	1
Residual Range Organics (RRO) (C25-C36)	**270**		100		mg/Kg	☼	09/26/16 09:09	09/26/16 22:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	*93*		*50 - 150*	*09/26/16 09:09*	*09/26/16 22:16*	*1*
n-Triacontane-d62	*101*		*50 - 150*	*09/26/16 09:09*	*09/26/16 22:16*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.1**	**J**	6.6	2.3	mg/Kg	☼	09/26/16 08:58	09/30/16 11:47	5
Barium	**100**		3.3	0.28	mg/Kg	☼	09/26/16 08:58	09/30/16 11:47	5
Cadmium	**0.34**	**J**	3.3	0.18	mg/Kg	☼	09/26/16 08:58	09/30/16 11:47	5
Chromium	**8.2**		3.3	0.30	mg/Kg	☼	09/26/16 08:58	09/30/16 11:47	5
Lead	**58**	**B**	6.6	1.8	mg/Kg	☼	09/26/16 08:58	09/30/16 11:47	5
Selenium	ND		16	5.4	mg/Kg	☼	09/26/16 08:58	09/30/16 11:47	5
Silver	ND		2.5	0.21	mg/Kg	☼	09/30/16 16:19	10/04/16 16:48	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**96**		48		ug/Kg	☼	09/29/16 09:17	09/30/16 14:16	1

Client Sample ID: DP-39(2-3):092216

Lab Sample ID: 590-4572-43
Date Collected: 09/22/16 13:45
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 70.6

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		35		ug/Kg	☼	09/29/16 10:42	09/30/16 16:03	1
2-Methylnaphthalene	ND		35		ug/Kg	☼	09/29/16 10:42	09/30/16 16:03	1
1-Methylnaphthalene	ND		35		ug/Kg	☼	09/29/16 10:42	09/30/16 16:03	1
Acenaphthylene	ND		35		ug/Kg	☼	09/29/16 10:42	09/30/16 16:03	1
Acenaphthene	ND		35		ug/Kg	☼	09/29/16 10:42	09/30/16 16:03	1
Fluorene	ND		35		ug/Kg	☼	09/29/16 10:42	09/30/16 16:03	1
Phenanthrene	ND		35		ug/Kg	☼	09/29/16 10:42	09/30/16 16:03	1
Anthracene	ND		35		ug/Kg	☼	09/29/16 10:42	09/30/16 16:03	1
Fluoranthene	ND		35		ug/Kg	☼	09/29/16 10:42	09/30/16 16:03	1
Pyrene	ND		35		ug/Kg	☼	09/29/16 10:42	09/30/16 16:03	1
Benzo[a]anthracene	ND		35		ug/Kg	☼	09/29/16 10:42	09/30/16 16:03	1
Chrysene	ND		35		ug/Kg	☼	09/29/16 10:42	09/30/16 16:03	1
Benzo[b]fluoranthene	ND		180		ug/Kg	☼	09/29/16 10:42	09/29/16 22:56	5
Benzo[k]fluoranthene	ND		180		ug/Kg	☼	09/29/16 10:42	09/29/16 22:56	5
Benzo[a]pyrene	ND		180		ug/Kg	☼	09/29/16 10:42	09/29/16 22:56	5
Indeno[1,2,3-cd]pyrene	ND		180		ug/Kg	☼	09/29/16 10:42	09/29/16 22:56	5
Dibenz(a,h)anthracene	ND		180		ug/Kg	☼	09/29/16 10:42	09/29/16 22:56	5

Client Sample ID: DP-39(2-3):092216

Lab Sample ID: 590-4572-43
Date Collected: 09/22/16 13:45
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 70.6

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		180		ug/Kg	☼	09/29/16 10:42	09/29/16 22:56	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*73*		*23 - 120*	*09/29/16 10:42*	*09/29/16 22:56*	*5*
Nitrobenzene-d5	*50*		*23 - 120*	*09/29/16 10:42*	*09/30/16 16:03*	*1*
2-Fluorobiphenyl (Surr)	*88*		*38 - 123*	*09/29/16 10:42*	*09/29/16 22:56*	*5*
2-Fluorobiphenyl (Surr)	*81*		*38 - 123*	*09/29/16 10:42*	*09/30/16 16:03*	*1*
p-Terphenyl-d14	*100*		*68 - 136*	*09/29/16 10:42*	*09/29/16 22:56*	*5*
p-Terphenyl-d14	*139*	*X*	*68 - 136*	*09/29/16 10:42*	*09/30/16 16:03*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		55		mg/Kg	☼	09/26/16 09:09	09/26/16 22:34	1
Diesel Range Organics (DRO) (C10-C25)	ND		140		mg/Kg	☼	09/26/16 09:09	09/26/16 22:34	1
Residual Range Organics (RRO) (C25-C36)	**160**		140		mg/Kg	☼	09/26/16 09:09	09/26/16 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*91*		*50 - 150*	*09/26/16 09:09*	*09/26/16 22:34*	*1*
n-Triacontane-d62	*96*		*50 - 150*	*09/26/16 09:09*	*09/26/16 22:34*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**16**		8.7	3.1	mg/Kg	☼	09/26/16 08:58	09/30/16 11:49	5
Barium	**63**		4.3	0.37	mg/Kg	☼	09/26/16 08:58	09/30/16 11:49	5
Cadmium	ND		4.3	0.24	mg/Kg	☼	09/26/16 08:58	09/30/16 11:49	5
Chromium	**9.0**		4.3	0.40	mg/Kg	☼	09/26/16 08:58	09/30/16 11:49	5
Lead	**10**	**B**	8.7	2.4	mg/Kg	☼	09/26/16 08:58	09/30/16 11:49	5
Selenium	ND		21	7.2	mg/Kg	☼	09/26/16 08:58	09/30/16 11:49	5
Silver	ND		3.0	0.26	mg/Kg	☼	09/30/16 16:19	10/04/16 16:50	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		49		ug/Kg	☼	09/29/16 09:17	09/30/16 14:18	1

Client Sample ID: DP-40(10.5-11.5):092216

Lab Sample ID: 590-4572-44
Date Collected: 09/22/16 14:10
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 92.9

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**26**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
2-Methylnaphthalene	**12**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
1-Methylnaphthalene	ND		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
Acenaphthylene	**67**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
Acenaphthene	ND		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
Fluorene	ND		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
Phenanthrene	**58**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
Anthracene	**57**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
Fluoranthene	**200**		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1

Client Sample ID: DP-40(10.5-11.5):092216
Date Collected: 09/22/16 14:10
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-44
Matrix: Solid
Percent Solids: 92.9

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	340		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
Benzo[a]anthracene	280		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
Chrysene	360		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
Benzo[b]fluoranthene	720		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
Benzo[k]fluoranthene	300		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
Benzo[a]pyrene	660		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
Indeno[1,2,3-cd]pyrene	290		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
Dibenz(a,h)anthracene	100		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1
Benzo[g,h,i]perylene	340		10		ug/Kg	☼	09/29/16 10:42	09/29/16 23:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*77*		*23 - 120*	*09/29/16 10:42*	*09/29/16 23:19*	*1*
2-Fluorobiphenyl (Surr)	*79*		*38 - 123*	*09/29/16 10:42*	*09/29/16 23:19*	*1*
p-Terphenyl-d14	*94*		*68 - 136*	*09/29/16 10:42*	*09/29/16 23:19*	*1*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		41		mg/Kg	☼	09/26/16 09:09	09/26/16 22:52	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg	☼	09/26/16 09:09	09/26/16 22:52	1
Residual Range Organics (RRO) (C25-C36)	ND		100		mg/Kg	☼	09/26/16 09:09	09/26/16 22:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*92*		*50 - 150*	*09/26/16 09:09*	*09/26/16 22:52*	*1*
n-Triacontane-d62	*92*		*50 - 150*	*09/26/16 09:09*	*09/26/16 22:52*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.4	J	6.6	2.3	mg/Kg	☼	09/26/16 08:58	09/30/16 11:51	5
Barium	75		3.3	0.28	mg/Kg	☼	09/26/16 08:58	09/30/16 11:51	5
Cadmium	ND		3.3	0.18	mg/Kg	☼	09/26/16 08:58	09/30/16 11:51	5
Chromium	7.5		3.3	0.30	mg/Kg	☼	09/26/16 08:58	09/30/16 11:51	5
Lead	56	B	6.6	1.8	mg/Kg	☼	09/26/16 08:58	09/30/16 11:51	5
Selenium	ND		16	5.4	mg/Kg	☼	09/26/16 08:58	09/30/16 11:51	5
Silver	ND		2.5	0.21	mg/Kg	☼	09/30/16 16:19	10/04/16 16:53	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	120		47		ug/Kg	☼	09/29/16 09:17	09/30/16 14:25	1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 590-8754/1-A
Matrix: Solid
Analysis Batch: 8765

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8754

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
2-Methylnaphthalene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
1-Methylnaphthalene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
Acenaphthylene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
Acenaphthene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
Fluorene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
Phenanthrene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
Anthracene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
Fluoranthene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
Pyrene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
Benzo[a]anthracene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
Chrysene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
Benzo[b]fluoranthene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
Benzo[k]fluoranthene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
Benzo[a]pyrene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
Indeno[1,2,3-cd]pyrene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
Dibenz(a,h)anthracene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1
Benzo[g,h,i]perylene	ND		10		ug/Kg		09/26/16 13:14	09/27/16 16:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*99*		*23 - 120*	*09/26/16 13:14*	*09/27/16 16:19*	*1*
2-Fluorobiphenyl (Surr)	*101*		*38 - 123*	*09/26/16 13:14*	*09/27/16 16:19*	*1*
p-Terphenyl-d14	*121*		*68 - 136*	*09/26/16 13:14*	*09/27/16 16:19*	*1*

Lab Sample ID: LCS 590-8754/2-A
Matrix: Solid
Analysis Batch: 8765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8754

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	267	205		ug/Kg		77	41 - 121
2-Methylnaphthalene	267	234		ug/Kg		88	39 - 132
1-Methylnaphthalene	267	228		ug/Kg		85	46 - 131
Acenaphthylene	267	260		ug/Kg		98	56 - 123
Acenaphthene	267	229		ug/Kg		86	43 - 140
Fluorene	267	213		ug/Kg		80	54 - 131
Phenanthrene	267	256		ug/Kg		96	55 - 141
Anthracene	267	254		ug/Kg		95	60 - 129
Fluoranthene	267	259		ug/Kg		97	63 - 141
Pyrene	267	249		ug/Kg		93	62 - 139
Benzo[a]anthracene	267	232		ug/Kg		87	61 - 136
Chrysene	267	239		ug/Kg		89	57 - 144
Benzo[b]fluoranthene	267	263		ug/Kg		99	66 - 141
Benzo[k]fluoranthene	267	266		ug/Kg		100	63 - 150
Benzo[a]pyrene	267	224		ug/Kg		84	60 - 133
Indeno[1,2,3-cd]pyrene	267	258		ug/Kg		97	55 - 142
Dibenz(a,h)anthracene	267	268		ug/Kg		100	60 - 150
Benzo[g,h,i]perylene	267	240		ug/Kg		90	58 - 147

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 590-8754/2-A
Matrix: Solid
Analysis Batch: 8765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8754

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*99*		*23 - 120*
2-Fluorobiphenyl (Surr)	*110*		*38 - 123*
p-Terphenyl-d14	*101*		*68 - 136*

Lab Sample ID: LCSD 590-8754/3-A
Matrix: Solid
Analysis Batch: 8765

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8754

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene			267	174		ug/Kg		65	41 - 121	16	35
2-Methylnaphthalene			267	211		ug/Kg		79	39 - 132	10	35
1-Methylnaphthalene			267	208		ug/Kg		78	46 - 131	9	35
Acenaphthylene			267	221		ug/Kg		83	56 - 123	16	35
Acenaphthene			267	218		ug/Kg		82	43 - 140	5	35
Fluorene			267	231		ug/Kg		87	54 - 131	8	35
Phenanthrene			267	233		ug/Kg		87	55 - 141	10	35
Anthracene			267	229		ug/Kg		86	60 - 129	10	35
Fluoranthene			267	226		ug/Kg		85	63 - 141	14	35
Pyrene			267	236		ug/Kg		88	62 - 139	5	35
Benzo[a]anthracene			267	226		ug/Kg		85	61 - 136	3	35
Chrysene			267	232		ug/Kg		87	57 - 144	3	35
Benzo[b]fluoranthene			267	249		ug/Kg		93	66 - 141	6	35
Benzo[k]fluoranthene			267	230		ug/Kg		86	63 - 150	15	35
Benzo[a]pyrene			267	216		ug/Kg		81	60 - 133	4	35
Indeno[1,2,3-cd]pyrene			267	249		ug/Kg		93	55 - 142	4	35
Dibenz(a,h)anthracene			267	251		ug/Kg		94	60 - 150	7	35
Benzo[g,h,i]perylene			267	240		ug/Kg		90	58 - 147	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*91*		*23 - 120*
2-Fluorobiphenyl (Surr)	*102*		*38 - 123*
p-Terphenyl-d14	*103*		*68 - 136*

Lab Sample ID: 590-4572-1 MS
Matrix: Solid
Analysis Batch: 8765

Client Sample ID: DP-1(0.5-1.5):092016
Prep Type: Total/NA
Prep Batch: 8754

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	140		722	641		ug/Kg	☼	70	41 - 121
2-Methylnaphthalene	350		722	847		ug/Kg	☼	69	39 - 132
1-Methylnaphthalene	330		722	821		ug/Kg	☼	68	46 - 131
Acenaphthylene	ND		722	628		ug/Kg	☼	84	56 - 123
Acenaphthene	ND		722	723		ug/Kg	☼	97	43 - 140
Fluorene	39		722	658		ug/Kg	☼	86	54 - 131
Phenanthrene	280	F1 F2	722	934		ug/Kg	☼	91	55 - 141
Anthracene	30		722	723		ug/Kg	☼	96	60 - 129
Fluoranthene	140	F1 F2	722	861		ug/Kg	☼	100	63 - 141
Pyrene	180	F1 F2	722	914		ug/Kg	☼	101	62 - 139

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 590-4572-1 MS
Matrix: Solid
Analysis Batch: 8765

Client Sample ID: DP-1(0.5-1.5):092016
Prep Type: Total/NA
Prep Batch: 8754

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	82		722	765		ug/Kg	☼	95	61 - 136
Chrysene	140		722	764		ug/Kg	☼	86	57 - 144
Benzo[b]fluoranthene	130		722	825		ug/Kg	☼	96	66 - 141
Benzo[k]fluoranthene	36		722	676		ug/Kg	☼	89	63 - 150
Benzo[a]pyrene	84	F1 F2	722	697		ug/Kg	☼	85	60 - 133
Indeno[1,2,3-cd]pyrene	56		722	686		ug/Kg	☼	87	55 - 142
Dibenz(a,h)anthracene	ND		722	682		ug/Kg	☼	91	60 - 150
Benzo[g,h,i]perylene	70		722	693		ug/Kg	☼	86	58 - 147

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*94*		*23 - 120*
2-Fluorobiphenyl (Surr)	*101*		*38 - 123*
p-Terphenyl-d14	*107*		*68 - 136*

Lab Sample ID: 590-4572-1 MSD
Matrix: Solid
Analysis Batch: 8765

Client Sample ID: DP-1(0.5-1.5):092016
Prep Type: Total/NA
Prep Batch: 8754

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	140		710	639		ug/Kg	☼	71	41 - 121	0	35
2-Methylnaphthalene	350		710	1010		ug/Kg	☼	93	39 - 132	18	35
1-Methylnaphthalene	330		710	887		ug/Kg	☼	78	46 - 131	8	35
Acenaphthylene	ND		710	558		ug/Kg	☼	76	56 - 123	12	35
Acenaphthene	ND		710	718		ug/Kg	☼	98	43 - 140	1	35
Fluorene	39		710	695		ug/Kg	☼	92	54 - 131	5	35
Phenanthrene	280	F1 F2	710	1370	F1 F2	ug/Kg	☼	154	55 - 141	38	35
Anthracene	30		710	748		ug/Kg	☼	101	60 - 129	3	35
Fluoranthene	140	F1 F2	710	1330	F1 F2	ug/Kg	☼	168	63 - 141	43	35
Pyrene	180	F1 F2	710	1350	F1 F2	ug/Kg	☼	164	62 - 139	39	35
Benzo[a]anthracene	82		710	942		ug/Kg	☼	121	61 - 136	21	35
Chrysene	140		710	954		ug/Kg	☼	114	57 - 144	22	35
Benzo[b]fluoranthene	130		710	1080		ug/Kg	☼	133	66 - 141	26	35
Benzo[k]fluoranthene	36		710	837		ug/Kg	☼	113	63 - 150	21	35
Benzo[a]pyrene	84	F1 F2	710	245	F1 F2	ug/Kg	☼	23	60 - 133	96	35
Indeno[1,2,3-cd]pyrene	56		710	688		ug/Kg	☼	89	55 - 142	0	35
Dibenz(a,h)anthracene	ND		710	584		ug/Kg	☼	79	60 - 150	15	35
Benzo[g,h,i]perylene	70		710	715		ug/Kg	☼	91	58 - 147	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*93*		*23 - 120*
2-Fluorobiphenyl (Surr)	*102*		*38 - 123*
p-Terphenyl-d14	*106*		*68 - 136*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 590-8786/1-A
Matrix: Solid
Analysis Batch: 8805

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8786

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
2-Methylnaphthalene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
1-Methylnaphthalene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
Acenaphthylene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
Acenaphthene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
Fluorene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
Phenanthrene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
Anthracene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
Fluoranthene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
Pyrene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
Benzo[a]anthracene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
Chrysene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
Benzo[b]fluoranthene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
Benzo[k]fluoranthene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
Benzo[a]pyrene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
Indeno[1,2,3-cd]pyrene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
Dibenz(a,h)anthracene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1
Benzo[g,h,i]perylene	ND		10		ug/Kg		09/27/16 14:30	09/28/16 12:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*88*		*23 - 120*	*09/27/16 14:30*	*09/28/16 12:12*	*1*
2-Fluorobiphenyl (Surr)	*107*		*38 - 123*	*09/27/16 14:30*	*09/28/16 12:12*	*1*
p-Terphenyl-d14	*106*		*68 - 136*	*09/27/16 14:30*	*09/28/16 12:12*	*1*

Lab Sample ID: LCS 590-8786/2-A
Matrix: Solid
Analysis Batch: 8805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8786

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	267	208		ug/Kg		78	41 - 121
2-Methylnaphthalene	267	242		ug/Kg		91	39 - 132
1-Methylnaphthalene	267	225		ug/Kg		84	46 - 131
Acenaphthylene	267	233		ug/Kg		87	56 - 123
Acenaphthene	267	207		ug/Kg		78	43 - 140
Fluorene	267	211		ug/Kg		79	54 - 131
Phenanthrene	267	250		ug/Kg		94	55 - 141
Anthracene	267	239		ug/Kg		90	60 - 129
Fluoranthene	267	234		ug/Kg		88	63 - 141
Pyrene	267	261		ug/Kg		98	62 - 139
Benzo[a]anthracene	267	253		ug/Kg		95	61 - 136
Chrysene	267	253		ug/Kg		95	57 - 144
Benzo[b]fluoranthene	267	273		ug/Kg		102	66 - 141
Benzo[k]fluoranthene	267	248		ug/Kg		93	63 - 150
Benzo[a]pyrene	267	217		ug/Kg		82	60 - 133
Indeno[1,2,3-cd]pyrene	267	252		ug/Kg		95	55 - 142
Dibenz(a,h)anthracene	267	247		ug/Kg		93	60 - 150
Benzo[g,h,i]perylene	267	252		ug/Kg		94	58 - 147

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 590-8786/2-A
Matrix: Solid
Analysis Batch: 8805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8786

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	86		23 - 120
2-Fluorobiphenyl (Surr)	92		38 - 123
p-Terphenyl-d14	102		68 - 136

Lab Sample ID: 590-4572-10 MS
Matrix: Solid
Analysis Batch: 8805

Client Sample ID: DP-9(0-1):092016
Prep Type: Total/NA
Prep Batch: 8786

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	21		295	237		ug/Kg	☼	73	41 - 121
2-Methylnaphthalene	33		295	279		ug/Kg	☼	84	39 - 132
1-Methylnaphthalene	26		295	259		ug/Kg	☼	79	46 - 131
Acenaphthylene	21		295	273		ug/Kg	☼	85	56 - 123
Acenaphthene	ND		295	269		ug/Kg	☼	91	43 - 140
Fluorene	ND		295	297		ug/Kg	☼	101	54 - 131
Phenanthrene	20		295	273		ug/Kg	☼	86	55 - 141
Anthracene	19		295	288		ug/Kg	☼	91	60 - 129
Fluoranthene	23		295	289		ug/Kg	☼	90	63 - 141
Pyrene	28		295	287		ug/Kg	☼	88	62 - 139
Benzo[a]anthracene	34		295	277		ug/Kg	☼	82	61 - 136
Chrysene	170		295	351		ug/Kg	☼	60	57 - 144
Benzo[b]fluoranthene	34		295	279		ug/Kg	☼	83	66 - 141
Benzo[k]fluoranthene	19		295	257		ug/Kg	☼	81	63 - 150
Benzo[a]pyrene	39		295	273		ug/Kg	☼	79	60 - 133
Indeno[1,2,3-cd]pyrene	65		295	295		ug/Kg	☼	78	55 - 142
Dibenz(a,h)anthracene	18		295	258		ug/Kg	☼	81	60 - 150
Benzo[g,h,i]perylene	120		295	319		ug/Kg	☼	68	58 - 147

Surrogate	MS %Recovery	MS Qualifier	Limits
Nitrobenzene-d5	71		23 - 120
2-Fluorobiphenyl (Surr)	91		38 - 123
p-Terphenyl-d14	83		68 - 136

Lab Sample ID: 590-4572-10 MSD
Matrix: Solid
Analysis Batch: 8805

Client Sample ID: DP-9(0-1):092016
Prep Type: Total/NA
Prep Batch: 8786

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	21		281	207		ug/Kg	☼	66	41 - 121	13	35
2-Methylnaphthalene	33		281	259		ug/Kg	☼	81	39 - 132	8	35
1-Methylnaphthalene	26		281	244		ug/Kg	☼	78	46 - 131	6	35
Acenaphthylene	21		281	234		ug/Kg	☼	76	56 - 123	15	35
Acenaphthene	ND		281	224		ug/Kg	☼	80	43 - 140	18	35
Fluorene	ND		281	219		ug/Kg	☼	78	54 - 131	30	35
Phenanthrene	20		281	241		ug/Kg	☼	79	55 - 141	12	35
Anthracene	19		281	290		ug/Kg	☼	97	60 - 129	1	35
Fluoranthene	23		281	263		ug/Kg	☼	86	63 - 141	10	35
Pyrene	28		281	239		ug/Kg	☼	75	62 - 139	18	35

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 590-4572-10 MSD
Matrix: Solid
Analysis Batch: 8805

Client Sample ID: DP-9(0-1):092016
Prep Type: Total/NA
Prep Batch: 8786

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	34		281	265		ug/Kg	☼	82	61 - 136	4	35
Chrysene	170		281	395		ug/Kg	☼	79	57 - 144	12	35
Benzo[b]fluoranthene	34		281	290		ug/Kg	☼	91	66 - 141	4	35
Benzo[k]fluoranthene	19		281	271		ug/Kg	☼	90	63 - 150	5	35
Benzo[a]pyrene	39		281	286		ug/Kg	☼	88	60 - 133	5	35
Indeno[1,2,3-cd]pyrene	65		281	322		ug/Kg	☼	92	55 - 142	9	35
Dibenz(a,h)anthracene	18		281	267		ug/Kg	☼	89	60 - 150	4	35
Benzo[g,h,i]perylene	120		281	372		ug/Kg	☼	90	58 - 147	15	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*71*		*23 - 120*
2-Fluorobiphenyl (Surr)	*80*		*38 - 123*
p-Terphenyl-d14	*90*		*68 - 136*

Lab Sample ID: MB 590-8830/1-A
Matrix: Solid
Analysis Batch: 8818

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8830

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
2-Methylnaphthalene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
1-Methylnaphthalene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
Acenaphthylene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
Acenaphthene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
Fluorene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
Phenanthrene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
Anthracene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
Fluoranthene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
Pyrene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
Benzo[a]anthracene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
Chrysene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
Benzo[b]fluoranthene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
Benzo[k]fluoranthene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
Benzo[a]pyrene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
Indeno[1,2,3-cd]pyrene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
Dibenz(a,h)anthracene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1
Benzo[g,h,i]perylene	ND		10		ug/Kg		09/29/16 10:42	09/29/16 16:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*77*		*23 - 120*	*09/29/16 10:42*	*09/29/16 16:07*	*1*
2-Fluorobiphenyl (Surr)	*85*		*38 - 123*	*09/29/16 10:42*	*09/29/16 16:07*	*1*
p-Terphenyl-d14	*105*		*68 - 136*	*09/29/16 10:42*	*09/29/16 16:07*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 590-8830/2-A
Matrix: Solid
Analysis Batch: 8818

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8830

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	267	149		ug/Kg		56	41 - 121
2-Methylnaphthalene	267	169		ug/Kg		63	39 - 132
1-Methylnaphthalene	267	149		ug/Kg		56	46 - 131
Acenaphthylene	267	194		ug/Kg		73	56 - 123
Acenaphthene	267	201		ug/Kg		75	43 - 140
Fluorene	267	217		ug/Kg		81	54 - 131
Phenanthrene	267	208		ug/Kg		78	55 - 141
Anthracene	267	216		ug/Kg		81	60 - 129
Fluoranthene	267	227		ug/Kg		85	63 - 141
Pyrene	267	236		ug/Kg		89	62 - 139
Benzo[a]anthracene	267	231		ug/Kg		87	61 - 136
Chrysene	267	233		ug/Kg		87	57 - 144
Benzo[b]fluoranthene	267	229		ug/Kg		86	66 - 141
Benzo[k]fluoranthene	267	250		ug/Kg		94	63 - 150
Benzo[a]pyrene	267	219		ug/Kg		82	60 - 133
Indeno[1,2,3-cd]pyrene	267	225		ug/Kg		85	55 - 142
Dibenz(a,h)anthracene	267	219		ug/Kg		82	60 - 150
Benzo[g,h,i]perylene	267	222		ug/Kg		83	58 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*80*		*23 - 120*
2-Fluorobiphenyl (Surr)	*72*		*38 - 123*
p-Terphenyl-d14	*91*		*68 - 136*

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Lab Sample ID: MB 590-8733/1-A
Matrix: Solid
Analysis Batch: 8740

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8733

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		40		mg/Kg		09/26/16 08:40	09/26/16 14:02	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg		09/26/16 08:40	09/26/16 14:02	1
Residual Range Organics (RRO) (C25-C36)	ND		100		mg/Kg		09/26/16 08:40	09/26/16 14:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*95*		*50 - 150*	*09/26/16 08:40*	*09/26/16 14:02*	*1*
n-Triacontane-d62	*93*		*50 - 150*	*09/26/16 08:40*	*09/26/16 14:02*	*1*

Lab Sample ID: 590-4572-1 DU
Matrix: Solid
Analysis Batch: 8740

Client Sample ID: DP-1(0.5-1.5):092016
Prep Type: Total/NA
Prep Batch: 8733

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		ND		mg/Kg	☼	NC	25

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Lab Sample ID: 590-4572-1 DU
Matrix: Solid
Analysis Batch: 8740

Client Sample ID: DP-1(0.5-1.5):092016
Prep Type: Total/NA
Prep Batch: 8733

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Diesel Range Organics (DRO) (C10-C25)	2800			3580		mg/Kg	☼			24	25
Residual Range Organics (RRO) (C25-C36)	4400			5600		mg/Kg	☼			23	25

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*116*		*50 - 150*
n-Triacontane-d62	*118*		*50 - 150*

Lab Sample ID: MB 590-8736/1-A
Matrix: Solid
Analysis Batch: 8739

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8736

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		40		mg/Kg		09/26/16 08:55	09/26/16 14:02	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg		09/26/16 08:55	09/26/16 14:02	1
Residual Range Organics (RRO) (C25-C36)	ND		100		mg/Kg		09/26/16 08:55	09/26/16 14:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*99*		*50 - 150*	*09/26/16 08:55*	*09/26/16 14:02*	*1*
n-Triacontane-d62	*94*		*50 - 150*	*09/26/16 08:55*	*09/26/16 14:02*	*1*

Lab Sample ID: 590-4572-17 DU
Matrix: Solid
Analysis Batch: 8739

Client Sample ID: DP-16(2-3):092016
Prep Type: Total/NA
Prep Batch: 8736

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND			ND		mg/Kg	☼			NC	25
Diesel Range Organics (DRO) (C10-C25)	7100			8890		mg/Kg	☼			22	25
Residual Range Organics (RRO) (C25-C36)	11000			13700		mg/Kg	☼			21	25

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*136*		*50 - 150*
n-Triacontane-d62	*118*		*50 - 150*

Lab Sample ID: 590-4572-18 DU
Matrix: Solid
Analysis Batch: 8739

Client Sample ID: DP-17(1-2):092116
Prep Type: Total/NA
Prep Batch: 8736

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND			ND		mg/Kg	☼			NC	25
Diesel Range Organics (DRO) (C10-C25)	ND			ND		mg/Kg	☼			NC	25

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Lab Sample ID: 590-4572-18 DU
Matrix: Solid
Analysis Batch: 8739

Client Sample ID: DP-17(1-2):092116
Prep Type: Total/NA
Prep Batch: 8736

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Residual Range Organics (RRO) (C25-C36)	ND			ND		mg/Kg	☼			NC	25

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*101*		*50 - 150*
n-Triacontane-d62	*111*		*50 - 150*

Lab Sample ID: MB 590-8742/1-A
Matrix: Solid
Analysis Batch: 8769

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8742

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		40		mg/Kg		09/26/16 09:09	09/26/16 21:04	1
Diesel Range Organics (DRO) (C10-C25)	ND		100		mg/Kg		09/26/16 09:09	09/26/16 21:04	1
Residual Range Organics (RRO) (C25-C36)	ND		100		mg/Kg		09/26/16 09:09	09/26/16 21:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*94*		*50 - 150*	*09/26/16 09:09*	*09/26/16 21:04*	*1*
n-Triacontane-d62	*93*		*50 - 150*	*09/26/16 09:09*	*09/26/16 21:04*	*1*

Lab Sample ID: 590-4572-34 DU
Matrix: Solid
Analysis Batch: 8769

Client Sample ID: DP-32(1.5-2.5):092216
Prep Type: Total/NA
Prep Batch: 8742

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND			ND		mg/Kg	☼			NC	25
Diesel Range Organics (DRO) (C10-C25)	ND			ND		mg/Kg	☼			NC	25
Residual Range Organics (RRO) (C25-C36)	340			277		mg/Kg	☼			21	25

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*99*		*50 - 150*
n-Triacontane-d62	*102*		*50 - 150*

Lab Sample ID: 590-4572-35 DU
Matrix: Solid
Analysis Batch: 8769

Client Sample ID: DP-33(1-2):092216
Prep Type: Total/NA
Prep Batch: 8742

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND			ND		mg/Kg	☼			NC	25
Diesel Range Organics (DRO) (C10-C25)	ND			ND		mg/Kg	☼			NC	25
Residual Range Organics (RRO) (C25-C36)	150			126		mg/Kg	☼			20	25

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Lab Sample ID: 590-4572-35 DU
Matrix: Solid
Analysis Batch: 8769

Client Sample ID: DP-33(1-2):092216
Prep Type: Total/NA
Prep Batch: 8742

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*95*		*50 - 150*
n-Triacontane-d62	*102*		*50 - 150*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 590-8735/2-A
Matrix: Solid
Analysis Batch: 8853

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8735

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.3	0.44	mg/Kg		09/26/16 08:54	09/29/16 16:03	1
Barium	0.167	J	0.63	0.053	mg/Kg		09/26/16 08:54	09/29/16 16:03	1
Cadmium	ND		0.63	0.035	mg/Kg		09/26/16 08:54	09/29/16 16:03	1
Chromium	0.0658	J	0.63	0.057	mg/Kg		09/26/16 08:54	09/29/16 16:03	1
Lead	0.690	J	1.3	0.35	mg/Kg		09/26/16 08:54	09/29/16 16:03	1
Selenium	1.65	J	3.0	1.0	mg/Kg		09/26/16 08:54	09/29/16 16:03	1

Lab Sample ID: LCS 590-8735/1-A
Matrix: Solid
Analysis Batch: 8867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8735

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	51.3		mg/Kg		103	80 - 120
Barium	50.0	51.5		mg/Kg		103	80 - 120
Cadmium	50.0	50.6		mg/Kg		101	80 - 120
Chromium	50.0	51.1		mg/Kg		102	80 - 120
Lead	50.0	51.6		mg/Kg		103	80 - 120
Selenium	500	529		mg/Kg		106	80 - 120
Silver	50.0	41.6		mg/Kg		83	80 - 120

Lab Sample ID: 590-4572-1 MS
Matrix: Solid
Analysis Batch: 8853

Client Sample ID: DP-1(0.5-1.5):092016
Prep Type: Total/NA
Prep Batch: 8735

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	3.2	J	53.0	47.4		mg/Kg	☼	83	75 - 125
Barium	190	B	53.0	242		mg/Kg	☼	101	75 - 125
Cadmium	1.7	J	53.0	49.6		mg/Kg	☼	90	75 - 125
Chromium	3.9	B	53.0	50.8		mg/Kg	☼	88	75 - 125
Lead	210	B F1 F2	53.0	315	F1	mg/Kg	☼	198	75 - 125
Selenium	ND		530	476		mg/Kg	☼	90	75 - 125
Silver	0.48	J F1	53.0	16.2	F1	mg/Kg	☼	30	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 590-4572-1 MSD
Matrix: Solid
Analysis Batch: 8853

Client Sample ID: DP-1(0.5-1.5):092016
Prep Type: Total/NA
Prep Batch: 8735

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	3.2	J	54.1	49.2		mg/Kg	☼	85	75 - 125	4	20
Barium	190	B	54.1	232		mg/Kg	☼	80	75 - 125	4	20
Cadmium	1.7	J	54.1	50.2		mg/Kg	☼	90	75 - 125	1	20
Chromium	3.9	B	54.1	52.2		mg/Kg	☼	89	75 - 125	3	20
Lead	210	B F1 F2	54.1	393	F1 F2	mg/Kg	☼	338	75 - 125	22	20
Selenium	ND		541	486		mg/Kg	☼	90	75 - 125	2	20
Silver	0.48	J F1	54.1	16.4	F1	mg/Kg	☼	30	75 - 125	2	20

Lab Sample ID: 590-4572-1 DU
Matrix: Solid
Analysis Batch: 8853

Client Sample ID: DP-1(0.5-1.5):092016
Prep Type: Total/NA
Prep Batch: 8735

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	3.2	J	3.05	J	mg/Kg	☼	5	20
Barium	190	B	139	F3	mg/Kg	☼	30	20
Cadmium	1.7	J	2.81	J F5	mg/Kg	☼	48	20
Chromium	3.9	B	5.15	F5	mg/Kg	☼	27	20
Lead	210	B F1 F2	235		mg/Kg	☼	11	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Silver	0.48	J F1	0.695	J F5	mg/Kg	☼	38	20

Lab Sample ID: MB 590-8737/2-A
Matrix: Solid
Analysis Batch: 8853

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8737

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.3	0.44	mg/Kg		09/26/16 08:56	09/29/16 17:17	1
Barium	ND		0.63	0.053	mg/Kg		09/26/16 08:56	09/29/16 17:17	1
Cadmium	ND		0.63	0.035	mg/Kg		09/26/16 08:56	09/29/16 17:17	1
Chromium	ND		0.63	0.057	mg/Kg		09/26/16 08:56	09/29/16 17:17	1
Lead	ND		1.3	0.35	mg/Kg		09/26/16 08:56	09/29/16 17:17	1
Selenium	2.22	J	3.0	1.0	mg/Kg		09/26/16 08:56	09/29/16 17:17	1
Silver	0.0615	J	0.63	0.053	mg/Kg		09/26/16 08:56	09/29/16 17:17	1

Lab Sample ID: LCS 590-8737/1-A
Matrix: Solid
Analysis Batch: 8853

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	49.5		mg/Kg		99	80 - 120
Barium	50.0	50.4		mg/Kg		101	80 - 120
Cadmium	50.0	50.1		mg/Kg		100	80 - 120
Chromium	50.0	50.0		mg/Kg		100	80 - 120
Lead	50.0	50.0		mg/Kg		100	80 - 120
Selenium	500	505		mg/Kg		101	80 - 120
Silver	50.0	50.8		mg/Kg		102	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 590-4572-19 MS
Matrix: Solid
Analysis Batch: 8853

Client Sample ID: DP-18(1.5-2.5):092116
Prep Type: Total/NA
Prep Batch: 8737

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	14		51.6	56.9		mg/Kg	☼	83	75 - 125
Barium	73	F1	51.6	113		mg/Kg	☼	76	75 - 125
Cadmium	ND		51.6	49.2		mg/Kg	☼	95	75 - 125
Chromium	9.2		51.6	59.5		mg/Kg	☼	97	75 - 125
Lead	36	F1 F2	51.6	139	F1	mg/Kg	☼	200	75 - 125
Selenium	ND		516	475		mg/Kg	☼	92	75 - 125
Silver	ND		51.6	49.7		mg/Kg	☼	96	75 - 125

Lab Sample ID: 590-4572-19 MSD
Matrix: Solid
Analysis Batch: 8853

Client Sample ID: DP-18(1.5-2.5):092116
Prep Type: Total/NA
Prep Batch: 8737

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	14		50.6	55.4		mg/Kg	☼	82	75 - 125	3	20
Barium	73	F1	50.6	105	F1	mg/Kg	☼	63	75 - 125	7	20
Cadmium	ND		50.6	48.3		mg/Kg	☼	96	75 - 125	2	20
Chromium	9.2		50.6	57.4		mg/Kg	☼	95	75 - 125	4	20
Lead	36	F1 F2	50.6	91.5	F2	mg/Kg	☼	109	75 - 125	41	20
Selenium	ND		506	475		mg/Kg	☼	94	75 - 125	0	20
Silver	ND		50.6	49.1		mg/Kg	☼	97	75 - 125	1	20

Lab Sample ID: 590-4572-19 DU
Matrix: Solid
Analysis Batch: 8853

Client Sample ID: DP-18(1.5-2.5):092116
Prep Type: Total/NA
Prep Batch: 8737

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	14		9.19	F5	mg/Kg	☼	42	20
Barium	73	F1	56.3	F3	mg/Kg	☼	26	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Chromium	9.2		9.64		mg/Kg	☼	4	20
Lead	36	F1 F2	38.0		mg/Kg	☼	5	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Silver	ND		ND		mg/Kg	☼	NC	20

Lab Sample ID: MB 590-8738/2-A
Matrix: Solid
Analysis Batch: 8864

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8738

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.3	0.44	mg/Kg		09/26/16 08:58	09/30/16 11:14	1
Barium	ND		0.63	0.053	mg/Kg		09/26/16 08:58	09/30/16 11:14	1
Cadmium	ND		0.63	0.035	mg/Kg		09/26/16 08:58	09/30/16 11:14	1
Chromium	ND		0.63	0.057	mg/Kg		09/26/16 08:58	09/30/16 11:14	1
Lead	1.11	J	1.3	0.35	mg/Kg		09/26/16 08:58	09/30/16 11:14	1
Selenium	1.26	J	3.0	1.0	mg/Kg		09/26/16 08:58	09/30/16 11:14	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 590-8738/1-A
Matrix: Solid
Analysis Batch: 8864

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8738

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	48.0		mg/Kg		96	80 - 120
Barium	50.0	47.8		mg/Kg		96	80 - 120
Cadmium	50.0	47.0		mg/Kg		94	80 - 120
Chromium	50.0	47.5		mg/Kg		95	80 - 120
Lead	50.0	48.2		mg/Kg		96	80 - 120
Selenium	500	487		mg/Kg		97	80 - 120

Lab Sample ID: 590-4572-37 MS
Matrix: Solid
Analysis Batch: 8864

Client Sample ID: DP-35(1.5-2.5):092216
Prep Type: Total/NA
Prep Batch: 8738

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	7.9		52.7	49.4		mg/Kg	☼	79	75 - 125
Barium	53		52.7	102		mg/Kg	☼	94	75 - 125
Cadmium	ND		52.7	44.6		mg/Kg	☼	85	75 - 125
Chromium	5.9		52.7	49.1		mg/Kg	☼	82	75 - 125
Lead	12	B	52.7	55.8		mg/Kg	☼	82	75 - 125
Selenium	ND		527	457		mg/Kg	☼	87	75 - 125

Lab Sample ID: 590-4572-37 MSD
Matrix: Solid
Analysis Batch: 8864

Client Sample ID: DP-35(1.5-2.5):092216
Prep Type: Total/NA
Prep Batch: 8738

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	7.9		52.2	48.7		mg/Kg	☼	78	75 - 125	1	20
Barium	53		52.2	100		mg/Kg	☼	92	75 - 125	2	20
Cadmium	ND		52.2	43.3		mg/Kg	☼	83	75 - 125	3	20
Chromium	5.9		52.2	49.0		mg/Kg	☼	83	75 - 125	0	20
Lead	12	B	52.2	55.5		mg/Kg	☼	83	75 - 125	1	20
Selenium	ND		522	442		mg/Kg	☼	85	75 - 125	3	20

Lab Sample ID: 590-4572-37 DU
Matrix: Solid
Analysis Batch: 8864

Client Sample ID: DP-35(1.5-2.5):092216
Prep Type: Total/NA
Prep Batch: 8738

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	7.9		6.17	J F5	mg/Kg	☼	25	20
Barium	53		55.7		mg/Kg	☼	6	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Chromium	5.9		4.96		mg/Kg	☼	18	20
Lead	12	B	14.4		mg/Kg	☼	14	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Silver	0.48	J F1	ND		mg/Kg	☼	NC	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 590-8858/2-A
Matrix: Solid
Analysis Batch: 8899

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8858

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.3	0.44	mg/Kg		09/30/16 10:01	10/03/16 13:03	1
Barium	0.0842	J	0.63	0.053	mg/Kg		09/30/16 10:01	10/03/16 13:03	1
Cadmium	ND		0.63	0.035	mg/Kg		09/30/16 10:01	10/03/16 13:03	1
Chromium	ND		0.63	0.057	mg/Kg		09/30/16 10:01	10/03/16 13:03	1
Lead	ND		1.3	0.35	mg/Kg		09/30/16 10:01	10/03/16 13:03	1
Selenium	1.57	J	3.0	1.0	mg/Kg		09/30/16 10:01	10/03/16 13:03	1
Silver	ND		0.63	0.053	mg/Kg		09/30/16 10:01	10/03/16 13:03	1

Lab Sample ID: LCS 590-8858/1-A
Matrix: Solid
Analysis Batch: 8899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8858

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	49.2		mg/Kg		98	80 - 120
Barium	50.0	49.6		mg/Kg		99	80 - 120
Cadmium	50.0	48.5		mg/Kg		97	80 - 120
Chromium	50.0	49.0		mg/Kg		98	80 - 120
Lead	50.0	49.4		mg/Kg		99	80 - 120
Selenium	500	510		mg/Kg		102	80 - 120
Silver	50.0	49.7		mg/Kg		99	80 - 120

Lab Sample ID: 590-4572-1 MS
Matrix: Solid
Analysis Batch: 8899

Client Sample ID: DP-1(0.5-1.5):092016
Prep Type: Total/NA
Prep Batch: 8858

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	6.7		51.5	53.6		mg/Kg	☼	91	75 - 125
Barium	110	B F1	51.5	121	F1	mg/Kg	☼	19	75 - 125
Cadmium	0.59		51.5	42.9		mg/Kg	☼	82	75 - 125
Chromium	8.9		51.5	49.8		mg/Kg	☼	79	75 - 125
Lead	170	F1	51.5	200	F1	mg/Kg	☼	62	75 - 125
Selenium	ND		515	447		mg/Kg	☼	87	75 - 125
Silver	0.11	J	51.5	43.6		mg/Kg	☼	84	75 - 125

Lab Sample ID: 590-4572-1 MSD
Matrix: Solid
Analysis Batch: 8899

Client Sample ID: DP-1(0.5-1.5):092016
Prep Type: Total/NA
Prep Batch: 8858

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	6.7		55.1	53.8		mg/Kg	☼	85	75 - 125	0	20
Barium	110	B F1	55.1	117	F1	mg/Kg	☼	9	75 - 125	4	20
Cadmium	0.59		55.1	47.5		mg/Kg	☼	85	75 - 125	10	20
Chromium	8.9		55.1	55.8		mg/Kg	☼	85	75 - 125	11	20
Lead	170	F1	55.1	177	F1	mg/Kg	☼	16	75 - 125	12	20
Selenium	ND		551	492		mg/Kg	☼	89	75 - 125	10	20
Silver	0.11	J	55.1	48.2		mg/Kg	☼	87	75 - 125	10	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 590-4572-1 DU
Matrix: Solid
Analysis Batch: 8899

Client Sample ID: DP-1(0.5-1.5):092016
Prep Type: Total/NA
Prep Batch: 8858

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	6.7		6.24		mg/Kg	☼	7	20
Barium	110	B F1	77.7	F3	mg/Kg	☼	36	20
Cadmium	0.59		0.670		mg/Kg	☼	13	20
Chromium	8.9		9.54		mg/Kg	☼	7	20
Lead	170	F1	133	F3	mg/Kg	☼	23	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Silver	0.11	J	0.0955	J	mg/Kg	☼	16	20

Lab Sample ID: MB 590-8871/2-A
Matrix: Solid
Analysis Batch: 8899

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8871

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.3	0.44	mg/Kg		09/30/16 16:19	10/03/16 13:53	1
Barium	0.108	J	0.63	0.053	mg/Kg		09/30/16 16:19	10/03/16 13:53	1
Cadmium	ND		0.63	0.035	mg/Kg		09/30/16 16:19	10/03/16 13:53	1
Chromium	ND		0.63	0.057	mg/Kg		09/30/16 16:19	10/03/16 13:53	1
Lead	ND		1.3	0.35	mg/Kg		09/30/16 16:19	10/03/16 13:53	1
Selenium	1.77	J	3.0	1.0	mg/Kg		09/30/16 16:19	10/03/16 13:53	1
Silver	ND		0.63	0.053	mg/Kg		09/30/16 16:19	10/03/16 13:53	1

Lab Sample ID: LCS 590-8871/1-A
Matrix: Solid
Analysis Batch: 8899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8871

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	49.1		mg/Kg		98	80 - 120
Barium	50.0	49.3		mg/Kg		99	80 - 120
Cadmium	50.0	48.7		mg/Kg		97	80 - 120
Chromium	50.0	48.3		mg/Kg		97	80 - 120
Lead	50.0	48.9		mg/Kg		98	80 - 120
Selenium	500	504		mg/Kg		101	80 - 120
Silver	50.0	48.9		mg/Kg		98	80 - 120

Lab Sample ID: 590-4572-37 MS
Matrix: Solid
Analysis Batch: 8899

Client Sample ID: DP-35(1.5-2.5):092216
Prep Type: Total/NA
Prep Batch: 8871

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.24	J	55.4	50.2		mg/Kg	☼	90	75 - 125

Lab Sample ID: 590-4572-37 MSD
Matrix: Solid
Analysis Batch: 8899

Client Sample ID: DP-35(1.5-2.5):092216
Prep Type: Total/NA
Prep Batch: 8871

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.24	J	57.2	53.8		mg/Kg	☼	94	75 - 125	7	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 590-4572-37 DU
Matrix: Solid
Analysis Batch: 8899

Client Sample ID: DP-35(1.5-2.5):092216
Prep Type: Total/NA
Prep Batch: 8871

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	0.24	J	0.367	J F5	mg/Kg	☼	43	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 590-8821/9-A
Matrix: Solid
Analysis Batch: 8865

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8821

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		50		ug/Kg		09/29/16 09:11	09/30/16 11:41	1

Lab Sample ID: LCS 590-8821/8-A
Matrix: Solid
Analysis Batch: 8865

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8821

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hg	200	203		ug/Kg		102	80 - 120

Lab Sample ID: MB 590-8822/2-A
Matrix: Solid
Analysis Batch: 8865

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8822

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		50		ug/Kg		09/29/16 09:14	09/30/16 12:25	1

Lab Sample ID: LCS 590-8822/1-A
Matrix: Solid
Analysis Batch: 8865

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8822

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hg	200	209		ug/Kg		105	80 - 120

Lab Sample ID: 590-4572-12 MS
Matrix: Solid
Analysis Batch: 8865

Client Sample ID: DP-11(1-2):092016
Prep Type: Total/NA
Prep Batch: 8822

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hg	ND		190	227		ug/Kg	☼	115	80 - 120

Lab Sample ID: 590-4572-12 MSD
Matrix: Solid
Analysis Batch: 8865

Client Sample ID: DP-11(1-2):092016
Prep Type: Total/NA
Prep Batch: 8822

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hg	ND		187	215		ug/Kg	☼	111	80 - 120	6	20

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 590-4572-12 DU
Matrix: Solid
Analysis Batch: 8865

Client Sample ID: DP-11(1-2):092016
Prep Type: Total/NA
Prep Batch: 8822

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Hg	ND			ND		ug/Kg	☼			NC	20

Lab Sample ID: MB 590-8823/2-A
Matrix: Solid
Analysis Batch: 8865

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8823

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		50		ug/Kg		09/29/16 09:17	09/30/16 13:34	1

Lab Sample ID: LCS 590-8823/1-A
Matrix: Solid
Analysis Batch: 8865

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8823

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hg			200	211		ug/Kg		106	80 - 120		

Lab Sample ID: 590-4572-31 MS
Matrix: Solid
Analysis Batch: 8865

Client Sample ID: DP-29(10-11):092116
Prep Type: Total/NA
Prep Batch: 8823

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hg	ND	F2	209	230		ug/Kg	☼	107	80 - 120		

Lab Sample ID: 590-4572-31 MSD
Matrix: Solid
Analysis Batch: 8865

Client Sample ID: DP-29(10-11):092116
Prep Type: Total/NA
Prep Batch: 8823

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hg	ND	F2	172	186	F2	ug/Kg	☼	104	80 - 120	21	20

Lab Sample ID: 590-4572-31 DU
Matrix: Solid
Analysis Batch: 8865

Client Sample ID: DP-29(10-11):092116
Prep Type: Total/NA
Prep Batch: 8823

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Hg	ND	F2		ND		ug/Kg	☼			NC	20

Client Sample ID: DP-1(0.5-1.5):092016

Lab Sample ID: 590-4572-1

Date Collected: 09/20/16 08:50

Matrix: Solid

Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Client Sample ID: DP-1(0.5-1.5):092016

Lab Sample ID: 590-4572-1

Date Collected: 09/20/16 08:50

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			6.01 g	2 mL	8754	09/26/16 13:14	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8765	09/27/16 18:12	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.23 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 14:58	NMI	TAL SPK
Total/NA	Prep	3050B			1.00 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 16:06	JSP	TAL SPK
Total/NA	Prep	7471B			0.55 g	50 mL	8821	09/29/16 09:11	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 11:53	JSP	TAL SPK

Client Sample ID: DP-1(3-4):092016

Lab Sample ID: 590-4572-2

Date Collected: 09/20/16 09:00

Matrix: Solid

Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Client Sample ID: DP-1(3-4):092016

Lab Sample ID: 590-4572-2

Date Collected: 09/20/16 09:00

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.19 g	2 mL	8754	09/26/16 13:14	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		5			8765	09/27/16 18:35	NMI	TAL SPK
Total/NA	Prep	3550C			15.19 g	2 mL	8754	09/26/16 13:14	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8765	09/27/16 22:22	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.39 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 15:36	NMI	TAL SPK
Total/NA	Prep	3050B			1.00 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 16:17	JSP	TAL SPK
Total/NA	Prep	7471B			0.56 g	50 mL	8821	09/29/16 09:11	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 11:55	JSP	TAL SPK

Client Sample ID: DP-2(0.5-1.5):092016 — **Lab Sample ID: 590-4572-3**
Date Collected: 09/20/16 09:20 — **Matrix: Solid**
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Client Sample ID: DP-2(0.5-1.5):092016 — **Lab Sample ID: 590-4572-3**
Date Collected: 09/20/16 09:20 — **Matrix: Solid**
Date Received: 09/23/16 12:10 — **Percent Solids: 78.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			6.00 g	2 mL	8754	09/26/16 13:14	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8765	09/27/16 18:58	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.14 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 15:55	NMI	TAL SPK
Total/NA	Prep	3050B			1.00 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 16:20	JSP	TAL SPK
Total/NA	Prep	7471B			0.64 g	50 mL	8821	09/29/16 09:11	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 11:57	JSP	TAL SPK

Client Sample ID: DP-3(0.5-1.5):092016 — **Lab Sample ID: 590-4572-4**
Date Collected: 09/20/16 09:50 — **Matrix: Solid**
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Client Sample ID: DP-3(0.5-1.5):092016 — **Lab Sample ID: 590-4572-4**
Date Collected: 09/20/16 09:50 — **Matrix: Solid**
Date Received: 09/23/16 12:10 — **Percent Solids: 95.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			4.00 g	2 mL	8754	09/26/16 13:14	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8765	09/27/16 19:20	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.52 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 16:14	NMI	TAL SPK
Total/NA	Prep	3050B			1.06 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 16:22	JSP	TAL SPK
Total/NA	Prep	7471B			0.53 g	50 mL	8821	09/29/16 09:11	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 12:00	JSP	TAL SPK

Client Sample ID: DP-4(1-2):092016 — **Lab Sample ID: 590-4572-5**
Date Collected: 09/20/16 10:30 — **Matrix: Solid**
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Lab Chronicle

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-1

Client Sample ID: DP-4(1-2):092016

Lab Sample ID: 590-4572-5
Date Collected: 09/20/16 10:30
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 97.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.06 g	2 mL	8754	09/26/16 13:14	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8765	09/27/16 19:43	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.41 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 16:33	NMI	TAL SPK
Total/NA	Prep	3050B			1.03 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 16:33	JSP	TAL SPK
Total/NA	Prep	7471B			0.53 g	50 mL	8821	09/29/16 09:11	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 12:06	JSP	TAL SPK

Client Sample ID: DP-5(0.5-1.5):092016

Lab Sample ID: 590-4572-6
Date Collected: 09/20/16 10:50
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Client Sample ID: DP-5(0.5-1.5):092016

Lab Sample ID: 590-4572-6
Date Collected: 09/20/16 10:50
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.30 g	2 mL	8754	09/26/16 13:14	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8765	09/27/16 20:06	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.27 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 16:51	NMI	TAL SPK
Total/NA	Prep	3050B			1.01 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 16:35	JSP	TAL SPK
Total/NA	Prep	7471B			0.56 g	50 mL	8821	09/29/16 09:11	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 12:09	JSP	TAL SPK

Client Sample ID: DP-6(1-2):092016

Lab Sample ID: 590-4572-7
Date Collected: 09/20/16 11:10
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Client Sample ID: DP-6(1-2):092016

Lab Sample ID: 590-4572-7
Date Collected: 09/20/16 11:10
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.34 g	2 mL	8754	09/26/16 13:14	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8765	09/27/16 20:28	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.28 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 17:10	NMI	TAL SPK
Total/NA	Prep	3050B			1.04 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 16:37	JSP	TAL SPK
Total/NA	Prep	7471B			0.59 g	50 mL	8821	09/29/16 09:11	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 12:11	JSP	TAL SPK

Client Sample ID: DP-7(1.5-2.5):092016

Lab Sample ID: 590-4572-8
Date Collected: 09/20/16 11:25
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Client Sample ID: DP-7(1.5-2.5):092016

Lab Sample ID: 590-4572-8
Date Collected: 09/20/16 11:25
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.72 g	2 mL	8754	09/26/16 13:14	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8765	09/27/16 20:51	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.75 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 17:28	NMI	TAL SPK
Total/NA	Prep	3050B			1.01 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 16:40	JSP	TAL SPK
Total/NA	Prep	7471B			0.58 g	50 mL	8821	09/29/16 09:11	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 12:13	JSP	TAL SPK

Client Sample ID: DP-8(0.5-1.5):092016

Lab Sample ID: 590-4572-9
Date Collected: 09/20/16 11:45
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Client Sample ID: DP-8(0.5-1.5):092016

Lab Sample ID: 590-4572-9
Date Collected: 09/20/16 11:45
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			6.16 g	2 mL	8754	09/26/16 13:14	EAF	TAL SPK

Client Sample ID: DP-8(0.5-1.5):092016

Lab Sample ID: 590-4572-9
Date Collected: 09/20/16 11:45
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D SIM		1			8765	09/27/16 21:14	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.66 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 17:46	NMI	TAL SPK
Total/NA	Prep	3050B			1.03 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 16:42	JSP	TAL SPK
Total/NA	Prep	7471B			0.56 g	50 mL	8821	09/29/16 09:11	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 12:16	JSP	TAL SPK

Client Sample ID: DP-9(0-1):092016

Lab Sample ID: 590-4572-10
Date Collected: 09/20/16 12:05
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Client Sample ID: DP-9(0-1):092016

Lab Sample ID: 590-4572-10
Date Collected: 09/20/16 12:05
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.34 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8805	09/28/16 13:43	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.55 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 18:04	NMI	TAL SPK
Total/NA	Prep	3050B			1.01 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 16:44	JSP	TAL SPK
Total/NA	Prep	7471B			0.56 g	50 mL	8821	09/29/16 09:11	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 12:18	JSP	TAL SPK

Client Sample ID: DP-10(1.5-2.5):092016

Lab Sample ID: 590-4572-11
Date Collected: 09/20/16 13:45
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Client Sample ID: DP-10(1.5-2.5):092016

Lab Sample ID: 590-4572-11
Date Collected: 09/20/16 13:45
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.41 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8805	09/28/16 14:05	NMI	TAL SPK

Lab Chronicle

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	NWTPH-HCID			10.66 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 18:22	NMI	TAL SPK
Total/NA	Prep	3050B			1.03 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 16:46	JSP	TAL SPK
Total/NA	Prep	7471B			0.59 g	50 mL	8821	09/29/16 09:11	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 12:20	JSP	TAL SPK

Client Sample ID: DP-11(1-2):092016
Lab Sample ID: 590-4572-12
Date Collected: 09/20/16 14:00
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Client Sample ID: DP-11(1-2):092016
Lab Sample ID: 590-4572-12
Date Collected: 09/20/16 14:00
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 95.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.49 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8805	09/28/16 14:28	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.86 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 18:40	NMI	TAL SPK
Total/NA	Prep	3050B			1.00 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 16:49	JSP	TAL SPK
Total/NA	Prep	7471B			0.58 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 12:27	JSP	TAL SPK

Client Sample ID: DP-12(1-2):092016
Lab Sample ID: 590-4572-13
Date Collected: 09/20/16 14:20
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Client Sample ID: DP-12(1-2):092016
Lab Sample ID: 590-4572-13
Date Collected: 09/20/16 14:20
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.49 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8805	09/28/16 14:51	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.36 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 18:58	NMI	TAL SPK
Total/NA	Prep	3050B			0.99 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 16:52	JSP	TAL SPK
Total/NA	Prep	7471B			0.61 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK

Client Sample ID: DP-12(1-2):092016 — **Lab Sample ID: 590-4572-13**
Date Collected: 09/20/16 14:20 — **Matrix: Solid**
Date Received: 09/23/16 12:10 — **Percent Solids: 93.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471B		1			8865	09/30/16 12:41	JSP	TAL SPK

Client Sample ID: DP-13(0-1):092016 — **Lab Sample ID: 590-4572-14**
Date Collected: 09/20/16 14:40 — **Matrix: Solid**
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Client Sample ID: DP-13(0-1):092016 — **Lab Sample ID: 590-4572-14**
Date Collected: 09/20/16 14:40 — **Matrix: Solid**
Date Received: 09/23/16 12:10 — **Percent Solids: 96.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			2.23 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8854	09/30/16 12:16	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.96 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 19:16	NMI	TAL SPK
Total/NA	Prep	3050B			1.02 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 16:54	JSP	TAL SPK
Total/NA	Prep	7471B			0.61 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 12:43	JSP	TAL SPK

Client Sample ID: DP-14(1-2):092016 — **Lab Sample ID: 590-4572-15**
Date Collected: 09/20/16 15:15 — **Matrix: Solid**
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Client Sample ID: DP-14(1-2):092016 — **Lab Sample ID: 590-4572-15**
Date Collected: 09/20/16 15:15 — **Matrix: Solid**
Date Received: 09/23/16 12:10 — **Percent Solids: 83.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			2.58 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8805	09/28/16 15:36	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.33 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 19:34	NMI	TAL SPK
Total/NA	Prep	3050B			1.01 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 17:05	JSP	TAL SPK
Total/NA	Prep	7471B			0.62 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 12:46	JSP	TAL SPK

Client Sample ID: DP-15(0.5-1.5):092016
Lab Sample ID: 590-4572-16

Date Collected: 09/20/16 15:30
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8734	09/26/16 08:46	EAF	TAL SPK

Client Sample ID: DP-15(0.5-1.5):092016
Lab Sample ID: 590-4572-16

Date Collected: 09/20/16 15:30
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.24 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8805	09/28/16 15:59	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.60 g	20 mL	8733	09/26/16 08:40	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8740	09/26/16 19:52	NMI	TAL SPK
Total/NA	Prep	3050B			1.00 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 17:07	JSP	TAL SPK
Total/NA	Prep	7471B			0.63 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 12:48	JSP	TAL SPK

Client Sample ID: DP-16(2-3):092016
Lab Sample ID: 590-4572-17

Date Collected: 09/20/16 15:50
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-16(2-3):092016
Lab Sample ID: 590-4572-17

Date Collected: 09/20/16 15:50
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.43 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8805	09/28/16 16:22	NMI	TAL SPK
Total/NA	Prep	3550C			15.43 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		5			8854	09/30/16 11:54	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.35 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8739	09/26/16 14:20	NMI	TAL SPK
Total/NA	Prep	3050B			1.03 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 17:09	JSP	TAL SPK
Total/NA	Prep	7471B			0.58 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 12:50	JSP	TAL SPK

Client Sample ID: DP-17(1-2):092116
Date Collected: 09/21/16 09:05
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-17(1-2):092116
Date Collected: 09/21/16 09:05
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-18
Matrix: Solid
Percent Solids: 93.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.70 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8818	09/30/16 00:04	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.91 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8739	09/26/16 14:58	NMI	TAL SPK
Total/NA	Prep	3050B			1.01 g	50 mL	8735	09/26/16 08:54	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 17:12	JSP	TAL SPK
Total/NA	Prep	7471B			0.55 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 12:52	JSP	TAL SPK

Client Sample ID: DP-18(1.5-2.5):092116
Date Collected: 09/21/16 10:00
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-18(1.5-2.5):092116
Date Collected: 09/21/16 10:00
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-19
Matrix: Solid
Percent Solids: 95.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.69 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8818	09/30/16 00:27	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.37 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8739	09/26/16 15:36	NMI	TAL SPK
Total/NA	Prep	3050B			1.02 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 17:20	JSP	TAL SPK
Total/NA	Prep	7471B			0.56 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 12:55	JSP	TAL SPK

Client Sample ID: DP-19(1.5-2.5):092116
Date Collected: 09/21/16 10:20
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-19(1.5-2.5):092116

Lab Sample ID: 590-4572-20
Date Collected: 09/21/16 10:20
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			2.57 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8854	09/30/16 12:39	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.67 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		2			8739	09/26/16 15:55	NMI	TAL SPK
Total/NA	Prep	3050B			0.99 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 17:40	JSP	TAL SPK
Total/NA	Prep	7471B			0.54 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 13:02	JSP	TAL SPK

Client Sample ID: DP-20(1-2):092116

Lab Sample ID: 590-4572-21
Date Collected: 09/21/16 10:40
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-20(1-2):092116

Lab Sample ID: 590-4572-21
Date Collected: 09/21/16 10:40
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 98.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			2.62 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		10			8818	09/30/16 01:13	NMI	TAL SPK
Total/NA	Prep	3550C			2.62 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8854	09/30/16 13:02	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.40 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		2			8739	09/26/16 16:14	NMI	TAL SPK
Total/NA	Prep	3050B			1.02 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 17:43	JSP	TAL SPK
Total/NA	Prep	7471B			0.56 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 13:04	JSP	TAL SPK

Client Sample ID: DP-21(1-2):092116

Lab Sample ID: 590-4572-22
Date Collected: 09/21/16 11:00
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-21(1-2):092116

Lab Sample ID: 590-4572-22
Date Collected: 09/21/16 11:00
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			2.53 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		20			8818	09/30/16 01:35	NMI	TAL SPK
Total/NA	Prep	3550C			2.53 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8854	09/30/16 13:24	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.90 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		2			8739	09/26/16 16:33	NMI	TAL SPK
Total/NA	Prep	3050B			1.01 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 17:46	JSP	TAL SPK
Total/NA	Prep	7471B			0.52 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 13:06	JSP	TAL SPK

Client Sample ID: DP-22(2-3):092116

Lab Sample ID: 590-4572-23
Date Collected: 09/21/16 11:40
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-22(2-3):092116

Lab Sample ID: 590-4572-23
Date Collected: 09/21/16 11:40
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 96.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			2.58 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		20			8818	09/30/16 01:58	NMI	TAL SPK
Total/NA	Prep	3550C			2.58 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		2			8854	09/30/16 13:47	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.60 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		2			8739	09/26/16 16:51	NMI	TAL SPK
Total/NA	Prep	3050B			1.01 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 17:49	JSP	TAL SPK
Total/NA	Prep	7471B			0.54 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 13:09	JSP	TAL SPK

Client Sample ID: DP-23(1-2):092116

Lab Sample ID: 590-4572-24
Date Collected: 09/21/16 12:15
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-23(1-2):092116

Lab Sample ID: 590-4572-24
Date Collected: 09/21/16 12:15
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 98.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			2.50 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		20			8818	09/30/16 02:21	NMI	TAL SPK
Total/NA	Prep	3550C			2.50 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		2			8854	09/30/16 14:10	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.86 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		2			8739	09/26/16 17:10	NMI	TAL SPK
Total/NA	Prep	3050B			1.00 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 17:53	JSP	TAL SPK
Total/NA	Prep	7471B			0.51 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 13:11	JSP	TAL SPK

Client Sample ID: DP-24(1-2):092116

Lab Sample ID: 590-4572-25
Date Collected: 09/21/16 12:30
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-24(1-2):092116

Lab Sample ID: 590-4572-25
Date Collected: 09/21/16 12:30
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 95.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			6.04 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8818	09/30/16 02:43	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.60 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8739	09/26/16 17:28	NMI	TAL SPK
Total/NA	Prep	3050B			1.04 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 17:56	JSP	TAL SPK
Total/NA	Prep	7471B			0.55 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 13:13	JSP	TAL SPK

Client Sample ID: DP-25(1-2):092116

Lab Sample ID: 590-4572-26
Date Collected: 09/21/16 13:00
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Lab Chronicle

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-1

Client Sample ID: DP-25(1-2):092116

Lab Sample ID: 590-4572-26
Date Collected: 09/21/16 13:00
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.62 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8818	09/30/16 03:06	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.28 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8739	09/26/16 17:46	NMI	TAL SPK
Total/NA	Prep	3050B			1.03 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 17:58	JSP	TAL SPK
Total/NA	Prep	7471B			0.54 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 13:16	JSP	TAL SPK

Client Sample ID: DP-26(1.5-2.5):092116

Lab Sample ID: 590-4572-27
Date Collected: 09/21/16 14:40
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-26(1.5-2.5):092116

Lab Sample ID: 590-4572-27
Date Collected: 09/21/16 14:40
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 96.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			6.05 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		10			8818	09/30/16 03:29	NMI	TAL SPK
Total/NA	Prep	3550C			6.05 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		5			8854	09/30/16 11:29	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.82 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8739	09/26/16 18:04	NMI	TAL SPK
Total/NA	Prep	3050B			1.02 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 18:01	JSP	TAL SPK
Total/NA	Prep	7471B			0.58 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 13:18	JSP	TAL SPK

Client Sample ID: DP-27(1.5-2.5):092116

Lab Sample ID: 590-4572-28
Date Collected: 09/21/16 15:00
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-27(1.5-2.5):092116

Lab Sample ID: 590-4572-28
Date Collected: 09/21/16 15:00
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			6.00 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8818	09/30/16 03:52	NMI	TAL SPK
Total/NA	Prep	3550C			6.00 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		10			8854	09/30/16 10:44	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.56 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8739	09/26/16 18:22	NMI	TAL SPK
Total/NA	Prep	3050B			1.06 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 18:03	JSP	TAL SPK
Total/NA	Prep	7471B			0.56 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 13:20	JSP	TAL SPK

Client Sample ID: DP-28(1-2):092116

Lab Sample ID: 590-4572-29
Date Collected: 09/21/16 15:40
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-28(1-2):092116

Lab Sample ID: 590-4572-29
Date Collected: 09/21/16 15:40
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.54 g	2 mL	8786	09/27/16 14:30	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8854	09/30/16 11:07	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.95 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8739	09/26/16 18:40	NMI	TAL SPK
Total/NA	Prep	3050B			1.00 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 18:13	JSP	TAL SPK
Total/NA	Prep	7471B			0.55 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 13:22	JSP	TAL SPK

Client Sample ID: DP-29(1.5-2.5):092116

Lab Sample ID: 590-4572-30
Date Collected: 09/21/16 16:05
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-29(1.5-2.5):092116
Date Collected: 09/21/16 16:05
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-30
Matrix: Solid
Percent Solids: 92.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.17 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		2			8818	09/29/16 18:01	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.37 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8739	09/26/16 18:58	NMI	TAL SPK
Total/NA	Prep	3050B			1.00 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 18:16	JSP	TAL SPK
Total/NA	Prep	7471B			0.59 g	50 mL	8822	09/29/16 09:14	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 13:29	JSP	TAL SPK

Client Sample ID: DP-29(10-11):092116
Date Collected: 09/21/16 16:10
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-31
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-29(10-11):092116
Date Collected: 09/21/16 16:10
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-31
Matrix: Solid
Percent Solids: 93.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.13 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8818	09/29/16 18:24	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.40 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8739	09/26/16 19:16	NMI	TAL SPK
Total/NA	Prep	3050B			1.01 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 18:18	JSP	TAL SPK
Total/NA	Prep	7471B			0.54 g	50 mL	8823	09/29/16 09:17	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 13:36	JSP	TAL SPK

Client Sample ID: DP-30(1.5-2.5):092116
Date Collected: 09/21/16 16:30
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-32
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-30(1.5-2.5):092116
Date Collected: 09/21/16 16:30
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-32
Matrix: Solid
Percent Solids: 96.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			3.04 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK

Lab Chronicle

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-1

Client Sample ID: DP-30(1.5-2.5):092116

Lab Sample ID: 590-4572-32
Date Collected: 09/21/16 16:30
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 96.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D SIM		5			8818	09/29/16 18:46	NMI	TAL SPK
Total/NA	Prep	3550C			3.04 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8854	09/30/16 14:33	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.56 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		2			8739	09/26/16 19:34	NMI	TAL SPK
Total/NA	Prep	3050B			1.00 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 18:20	JSP	TAL SPK
Total/NA	Prep	7471B			0.56 g	50 mL	8823	09/29/16 09:17	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 13:48	JSP	TAL SPK

Client Sample ID: DP-31(2-3):092216

Lab Sample ID: 590-4572-33
Date Collected: 09/22/16 08:30
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8743	09/26/16 09:18	EAF	TAL SPK

Client Sample ID: DP-31(2-3):092216

Lab Sample ID: 590-4572-33
Date Collected: 09/22/16 08:30
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 92.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.17 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8818	09/29/16 19:09	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.63 g	20 mL	8736	09/26/16 08:55	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8739	09/26/16 19:52	NMI	TAL SPK
Total/NA	Prep	3050B			1.04 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 18:23	JSP	TAL SPK
Total/NA	Prep	7471B			0.58 g	50 mL	8823	09/29/16 09:17	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 13:50	JSP	TAL SPK

Client Sample ID: DP-32(1.5-2.5):092216

Lab Sample ID: 590-4572-34
Date Collected: 09/22/16 09:30
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8745	09/26/16 09:33	EAF	TAL SPK

Client Sample ID: DP-32(1.5-2.5):092216

Lab Sample ID: 590-4572-34

Date Collected: 09/22/16 09:30

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 95.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			4.04 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		20			8818	09/29/16 19:32	NMI	TAL SPK
Total/NA	Prep	3550C			4.04 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8854	09/30/16 14:55	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.22 g	20 mL	8742	09/26/16 09:09	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8769	09/26/16 21:22	NMI	TAL SPK
Total/NA	Prep	3050B			1.01 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 18:25	JSP	TAL SPK
Total/NA	Prep	7471B			0.54 g	50 mL	8823	09/29/16 09:17	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 13:57	JSP	TAL SPK

Client Sample ID: DP-33(1-2):092216

Lab Sample ID: 590-4572-35

Date Collected: 09/22/16 09:55

Matrix: Solid

Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8745	09/26/16 09:33	EAF	TAL SPK

Client Sample ID: DP-33(1-2):092216

Lab Sample ID: 590-4572-35

Date Collected: 09/22/16 09:55

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 96.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.21 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8818	09/29/16 19:54	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.28 g	20 mL	8742	09/26/16 09:09	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8769	09/26/16 21:58	NMI	TAL SPK
Total/NA	Prep	3050B			1.02 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 18:27	JSP	TAL SPK
Total/NA	Prep	7471B	RADL		0.57 g	50 mL	8823	09/29/16 09:17	JSP	TAL SPK
Total/NA	Analysis	7471B	RADL	1			8865	09/30/16 14:00	JSP	TAL SPK

Client Sample ID: DP-34(1.5-2.5):092216

Lab Sample ID: 590-4572-36

Date Collected: 09/22/16 10:00

Matrix: Solid

Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8745	09/26/16 09:33	EAF	TAL SPK

Client Sample ID: DP-34(1.5-2.5):092216

Lab Sample ID: 590-4572-36
Date Collected: 09/22/16 10:00
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			6.06 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8818	09/29/16 20:17	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.43 g	20 mL	8742	09/26/16 09:09	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8769	09/26/16 22:34	NMI	TAL SPK
Total/NA	Prep	3050B			1.01 g	50 mL	8737	09/26/16 08:56	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8853	09/29/16 18:30	JSP	TAL SPK
Total/NA	Prep	7471B			0.59 g	50 mL	8823	09/29/16 09:17	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 14:02	JSP	TAL SPK

Client Sample ID: DP-35(1.5-2.5):092216

Lab Sample ID: 590-4572-37
Date Collected: 09/22/16 11:20
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8745	09/26/16 09:33	EAF	TAL SPK

Client Sample ID: DP-35(1.5-2.5):092216

Lab Sample ID: 590-4572-37
Date Collected: 09/22/16 11:20
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			2.54 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		20			8818	09/29/16 20:40	NMI	TAL SPK
Total/NA	Prep	3550C			2.54 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8854	09/30/16 15:18	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.42 g	20 mL	8742	09/26/16 09:09	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8769	09/26/16 22:52	NMI	TAL SPK
Total/NA	Prep	3050B			1.00 g	50 mL	8738	09/26/16 08:58	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8864	09/30/16 11:17	JSP	TAL SPK
Total/NA	Prep	3050B			1.47 g	50 mL	8871	09/30/16 16:19	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8899	10/03/16 14:28	JSP	TAL SPK
Total/NA	Prep	7471B			0.57 g	50 mL	8823	09/29/16 09:17	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 14:04	JSP	TAL SPK

Client Sample ID: DP-35(10-11):092216

Lab Sample ID: 590-4572-38
Date Collected: 09/22/16 11:25
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8745	09/26/16 09:33	EAF	TAL SPK

Client Sample ID: DP-35(10-11):092216

Lab Sample ID: 590-4572-38

Date Collected: 09/22/16 11:25

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.43 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8818	09/29/16 21:03	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.75 g	20 mL	8742	09/26/16 09:09	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8770	09/26/16 21:04	NMI	TAL SPK
Total/NA	Prep	3050B			1.01 g	50 mL	8738	09/26/16 08:58	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8864	09/30/16 11:28	JSP	TAL SPK
Total/NA	Prep	3050B			1.50 g	50 mL	8871	09/30/16 16:19	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8931	10/04/16 16:35	JSP	TAL SPK
Total/NA	Prep	7471B			0.63 g	50 mL	8823	09/29/16 09:17	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 14:07	JSP	TAL SPK

Client Sample ID: DP-36(2-3):092216

Lab Sample ID: 590-4572-39

Date Collected: 09/22/16 11:50

Matrix: Solid

Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8745	09/26/16 09:33	EAF	TAL SPK

Client Sample ID: DP-36(2-3):092216

Lab Sample ID: 590-4572-39

Date Collected: 09/22/16 11:50

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 93.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			2.56 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		10			8818	09/29/16 21:25	NMI	TAL SPK
Total/NA	Prep	3550C			2.56 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8854	09/30/16 15:41	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.92 g	20 mL	8742	09/26/16 09:09	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8770	09/26/16 21:22	NMI	TAL SPK
Total/NA	Prep	3050B			1.02 g	50 mL	8738	09/26/16 08:58	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8864	09/30/16 11:31	JSP	TAL SPK
Total/NA	Prep	3050B			1.53 g	50 mL	8871	09/30/16 16:19	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8931	10/04/16 16:38	JSP	TAL SPK
Total/NA	Prep	7471B			0.61 g	50 mL	8823	09/29/16 09:17	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 14:09	JSP	TAL SPK

Client Sample ID: DP-37(10-11):092216

Lab Sample ID: 590-4572-40

Date Collected: 09/22/16 12:00

Matrix: Solid

Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8745	09/26/16 09:33	EAF	TAL SPK

Client Sample ID: DP-37(10-11):092216

Lab Sample ID: 590-4572-40

Date Collected: 09/22/16 12:00

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.19 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8818	09/29/16 21:48	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.47 g	20 mL	8742	09/26/16 09:09	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8770	09/26/16 21:40	NMI	TAL SPK
Total/NA	Prep	3050B			1.06 g	50 mL	8738	09/26/16 08:58	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8864	09/30/16 11:41	JSP	TAL SPK
Total/NA	Prep	3050B			1.51 g	50 mL	8871	09/30/16 16:19	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8931	10/04/16 16:41	JSP	TAL SPK
Total/NA	Prep	7471B			0.60 g	50 mL	8823	09/29/16 09:17	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 14:11	JSP	TAL SPK

Client Sample ID: DP-38(2-3):092216

Lab Sample ID: 590-4572-41

Date Collected: 09/22/16 13:25

Matrix: Solid

Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8745	09/26/16 09:33	EAF	TAL SPK

Client Sample ID: DP-38(2-3):092216

Lab Sample ID: 590-4572-41

Date Collected: 09/22/16 13:25

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 90.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			6.03 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8818	09/29/16 22:11	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.22 g	20 mL	8742	09/26/16 09:09	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8770	09/26/16 21:58	NMI	TAL SPK
Total/NA	Prep	3050B			1.02 g	50 mL	8738	09/26/16 08:58	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8864	09/30/16 11:43	JSP	TAL SPK
Total/NA	Prep	3050B			1.34 g	50 mL	8871	09/30/16 16:19	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8931	10/04/16 16:44	JSP	TAL SPK
Total/NA	Prep	7471B			0.61 g	50 mL	8823	09/29/16 09:17	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 14:14	JSP	TAL SPK

Client Sample ID: DP-38(6-7):092216

Lab Sample ID: 590-4572-42

Date Collected: 09/22/16 13:30

Matrix: Solid

Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8745	09/26/16 09:33	EAF	TAL SPK

Client Sample ID: DP-38(6-7):092216

Lab Sample ID: 590-4572-42

Date Collected: 09/22/16 13:30

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			6.07 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8818	09/29/16 22:34	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.74 g	20 mL	8742	09/26/16 09:09	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8770	09/26/16 22:16	NMI	TAL SPK
Total/NA	Prep	3050B			1.05 g	50 mL	8738	09/26/16 08:58	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8864	09/30/16 11:47	JSP	TAL SPK
Total/NA	Prep	3050B			1.37 g	50 mL	8871	09/30/16 16:19	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8931	10/04/16 16:48	JSP	TAL SPK
Total/NA	Prep	7471B			0.58 g	50 mL	8823	09/29/16 09:17	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 14:16	JSP	TAL SPK

Client Sample ID: DP-39(2-3):092216

Lab Sample ID: 590-4572-43

Date Collected: 09/22/16 13:45

Matrix: Solid

Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8745	09/26/16 09:33	EAF	TAL SPK

Client Sample ID: DP-39(2-3):092216

Lab Sample ID: 590-4572-43

Date Collected: 09/22/16 13:45

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 70.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			6.02 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		5			8818	09/29/16 22:56	NMI	TAL SPK
Total/NA	Prep	3550C			6.02 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8854	09/30/16 16:03	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.34 g	20 mL	8742	09/26/16 09:09	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8770	09/26/16 22:34	NMI	TAL SPK
Total/NA	Prep	3050B			1.02 g	50 mL	8738	09/26/16 08:58	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8864	09/30/16 11:49	JSP	TAL SPK
Total/NA	Prep	3050B			1.47 g	50 mL	8871	09/30/16 16:19	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8931	10/04/16 16:50	JSP	TAL SPK
Total/NA	Prep	7471B			0.72 g	50 mL	8823	09/29/16 09:17	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 14:18	JSP	TAL SPK

Client Sample ID: DP-40(10.5-11.5):092216

Lab Sample ID: 590-4572-44

Date Collected: 09/22/16 14:10

Matrix: Solid

Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			8745	09/26/16 09:33	EAF	TAL SPK

Lab Chronicle

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-1

Client Sample ID: DP-40(10.5-11.5):092216
Date Collected: 09/22/16 14:10
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-44
Matrix: Solid
Percent Solids: 92.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.52 g	2 mL	8830	09/29/16 10:42	EAF	TAL SPK
Total/NA	Analysis	8270D SIM		1			8818	09/29/16 23:19	NMI	TAL SPK
Total/NA	Prep	NWTPH-HCID			10.60 g	20 mL	8742	09/26/16 09:09	EAF	TAL SPK
Total/NA	Analysis	NWTPH-HCID		1			8770	09/26/16 22:52	NMI	TAL SPK
Total/NA	Prep	3050B			1.02 g	50 mL	8738	09/26/16 08:58	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8864	09/30/16 11:51	JSP	TAL SPK
Total/NA	Prep	3050B			1.34 g	50 mL	8871	09/30/16 16:19	JSP	TAL SPK
Total/NA	Analysis	6010C		5			8931	10/04/16 16:53	JSP	TAL SPK
Total/NA	Prep	7471B			0.57 g	50 mL	8823	09/29/16 09:17	JSP	TAL SPK
Total/NA	Analysis	7471B		1			8865	09/30/16 14:25	JSP	TAL SPK

Laboratory References:

TAL SPK = TestAmerica Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Certification Summary

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-1

Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-17
Washington	State Program	10	C569	01-06-17

Method Summary

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-1

Method	Method Description	Protocol	Laboratory
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL SPK
NWTPH-HCID	Northwest - Hydrocarbon Identification (GC)	NWTPH	TAL SPK
6010C	Metals (ICP)	SW846	TAL SPK
7471B	Mercury (CVAA)	SW846	TAL SPK
Moisture	Percent Moisture	EPA	TAL SPK

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SPK = TestAmerica Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Fax (509) 924-9290

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Josh Lee	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-1806-651.1
Client Contact: JR Sugalski	Phone: 406-239-7810	E-Mail: randee.arrington@testamericainc.com		Page: Page 1 of 4
Company: GeoEngineers Inc				Job #:

Address: 523 East Second Ave	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Spokane	TAT Requested (days): Std.		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: WA, 99202			
Phone: 509-209-2830(Tel)	PO #: Purchase Order not required		
Email: jsugalski@geoengineers.com	WO #		Other:
Project Name: Riverfront Park (00110-148-04)	Project #: 59000877		
Site: Riverfront Park	SSOW#:		2.1°C

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C	NWTPH - HCID	RCRA metals	PAH's 8270D - SIM	7471B - Hg	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
DP-1 (0.5-1.5): 092016	9/20/16	0850	G	S			X	X	X	X	X	3	
DP-1 (3-4): 092016	9/20/16	0900		S			X	X	X	X	X	3	
DP-2 (0.5-1.5): 092016	9/20/16	0920		S			X	X	X	X	X	3	
DP-3 (0.5-1.5): 092016	9/20/16	0950		S								1	
DP-4 (1-2): 092016	9/20/16	1030		S									
DP-5 (0.5-1.5): 092016	9/20/16	1050		S									
DP-6 (1-2): 092016	9/20/16	1110		S									
DP-7 (1.5-2.5): 092016	9/20/16	1125		S									
DP-8 (0.5-1.5): 092016	9/20/16	1145		S									
DP-9 (0.5-1): 092016	9/20/16	1205		S									
DP-10 (1.5-2.5): 092016	9/20/16	1345		S									

590-4572 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Josh Lee	9/23/2016 1210	GEI		9-23-16 1210	TASPK
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Fax (509) 924-9290

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: JML	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-1806-651.2
Client Contact: JR Sugalski	Phone: 406-239-7810	E-Mail: randee.arrington@testamericainc.com		Page: Page 2 of 3 4
Company: GeoEngineers Inc				Job #:
Address: 523 East Second Ave	Due Date Requested:			
City: Spokane	TAT Requested (days): Std.			
State, Zip: WA, 99202				
Phone: 509-209-2830(Tel)	PO #: Purchase Order not required			
Email: jsugalski@geoengineers.com	WO #:			
Project Name: Riverfront Park (00110-148-04) -06	Project #: 59000877			
Site: Riverfront Park	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C NWTPH-HCID	RCRA - 8	7471B - Hg	PAHs 8270D - SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:									2 PC
DP-11 (1-2): 092016	9/20/16	1400	G	S			X	X	X	X	3	
DP-12 (1-2): 092016	9/20/16	1420		S								
DP-13 (0-1): 092016	9/20/16	1440		S								
DP-14 (1-2): 092016	9/20/16	1515		S								
DP-15 (0.5-1.5): 092016	9/20/16	1530		S								
DP-16 (2-3): 092016	9/20/16	1550		S								
DP-17 (1-2): 092016	9/21/16	0905		S								
DP-18 (1.5-2.5): 092116	9/21/16	1000		S								
DP-19 (1.5-2.5): 092116	9/21/16	1020		S								
DP-20 (1-2): 092116	9/21/16	1040		S								
DP-21 (1-2): 092116	9/21/16	1100		S								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Josh Lee	9/23/2016 1210	GEI		9-23-16 1210	TASK
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

11/2/2016

TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Fax (509) 924-9290

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: JML	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-1806-651.3
Client Contact: JR Sugalski	Phone: 406-239-7810	E-Mail: randee.arrington@testamericainc.com		Page: Page 3 of 4
Company: GeoEngineers Inc				Job #:

Address: 523 East Second Ave	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Spokane	TAT Requested (days): Std.		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: WA, 99202			
Phone: 509-209-2830(Tel)	PO #: Purchase Order not required		Other:
Email: jsugalski@geoengineers.com	WO #:		
Project Name: Riverfront Park (00110-148-04) -06	Project #: 59000877		
Site: Riverfrot Park	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOCs 8260C	NWTPH - HCID	RCRA w/o mercury	7471B - Hg	PAHs	Total Number of containers	Special Instructions/Note:
			Preservation Code:										2.1°C
DP-23 (1-2): 092116	9/21/16	1215	G	S				X	X	X	X	3	
DP-24 (1-2): 092116	9/21/16	1230		S									
DP-25 (1-2): 092116	9/21/16	1300		S									
DP-26 (1.5-2.5): 092116	9/21/16	1440		S									
DP-27 (1.5-2.5): 092116	9/21/16	1500		S									
DP-28 (1-2): 092116	9/21/16	1540		S									
DP-29 (1.5-2.5): 092116	9/21/16	1605		S									
DP-29 (10-11): 092116	9/21/16	1610		S									
DP-30 (1.5-2.5): 092116	9/21/16	1630		S									
DP-31 (2-3): 092216	9/22/16	0830		S									
DP-32 (1.5-2.5): 092216	9/22/16	0930		S									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Josh Lee	9/23/2016 1210	GEI		9-23-16 1210	TA Spk
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

11/2/2016

TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Fax (509) 924-9290

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: JML	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-1806-651.4
Client Contact: JR Sugalski	Phone: 406-239-7816	E-Mail: randee.arrington@testamericainc.com		Page: Page 4 of 84

Company: GeoEngineers Inc
Address: 523 East Second Ave
City: Spokane
State, Zip: WA, 99202
Phone: 509-209-2830(Tel)
Email: jsugalski@geoengineers.com
Project Name: Riverfront Park (00110-148-04)
Site: Riverfront Park

Due Date Requested:
TAT Requested (days): Std.
PO #: Purchase Order not required
WO #:
Project #: 59000877
SSOW#:

Job #:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Special Instructions/Note: Z. 10C

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOCs 8260C	NWTPH - HCID	RCRA w/o nnc	7471B - Hg	PAHs	Total Number of containers
			Preservation Code:									
DP-33(1-2)092216	9/22/16	0955	G	S			X	X	X	X		3
DP-34(1.5-2.5)092216	9/22/16	1100		S								3
DP-35(1.5-2.5)092216	9/22/16	1120		S								3
DP-35(10-11)092216	9/22/16	1125		S								3
DP-36(2-3)092216	9/22/16	1150		S								3
DP-37(10-11)092216	9/22/16	1200		S								3
DP-38(2-3)092216	9/22/16	1325		S								3
DP-38(6-7)092216	9/22/16	1330		S								3
DP-39(2-3)092216	9/22/16	1345		S								3
DP-40(10.5-11.5)092216	9/22/16	1410		S								3
DP-22(2-3)092116	9/21/16	1140		S								3

List in order on report

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Josh Lee	9/23/2016 1210	GE-T		9-23-16 1210	TA-SPK
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: GeoEngineers Inc

Job Number: 590-4572-1

Login Number: 4572
List Number: 1
Creator: Williams, Chris B

List Source: TestAmerica Spokane

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: 590-4572-2
Client Project/Site: Riverfront Park (00110-148-06)

For:
GeoEngineers Inc
523 East Second Ave
Spokane, Washington 99202

Attn: JR Sugalski

Authorized for release by:
10/12/2016 3:16:54 PM

Randee Arrington, Project Manager II
(509)924-9200
randee.arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 590-4572-2

Laboratory: TestAmerica Spokane

Narrative

Receipt
The samples were received on 9/23/2016 12:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

Receipt Exceptions
The following samples were activated for NWTPH-Dx and 8082A PCB analysis by the client on 10/05/2016: DP-1(0.5-1.5):092016 (590-4572-1), DP-1(3-4):092016 (590-4572-2), DP-13(0-1):092016 (590-4572-14), DP-16(2-3):092016 (590-4572-17), DP-19(1.5-2.5):092116 (590-4572-20), DP-20(1-2):092116 (590-4572-21), DP-21(1-2):092116 (590-4572-22), DP-22(2-3):092116 (590-4572-23), DP-23(1-2):092116 (590-4572-24), DP-35(1.5-2.5):092216 (590-4572-37) and DP-36(2-3):092216 (590-4572-39). This analysis was not originally requested on the chain-of-custody (COC).

The following samples were activated for TCLP Lead analysis by the client on 10/05/2016: DP-2(0.5-1.5):092016 (590-4572-3), DP-3(0.5-1.5):092016 (590-4572-4), DP-15(0.5-1.5):092016 (590-4572-16), DP-17(1-2):092116 (590-4572-18), DP-25(1-2):092116 (590-4572-26), DP-33(1-2):092216 (590-4572-35) and DP-38(2-3):092216 (590-4572-41). This analysis was not originally requested on the chain-of-custody (COC).

The following samples were activated for 8260C VOC analysis by the client on 10/05/2016: DP-16(2-3):092016 (590-4572-17) and DP-23(1-2):092116 (590-4572-24). This analysis was not originally requested on the chain-of-custody (COC).

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 580-229461 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: DP-16(2-3):092016 (590-4572-17), DP-23(1-2):092116 (590-4572-24) and (CCVIS 580-229461/3).

Method 8260C: The following samples were analyzed outside of analytical holding time: DP-16(2-3):092016 (590-4572-17) and DP-23(1-2):092116 (590-4572-24).

Method 8260C: Methylene chloride, a common laboratory contaminant, was detected above the reporting limit in the following samples: DP-16(2-3):092016 (590-4572-17) and DP-23(1-2):092116 (590-4572-24).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method NWTPH-Dx: Detected hydrocarbons appear to be due to a light weight oil in the following samples: DP-1(0.5-1.5):092016 (590-4572-1), DP-1(3-4):092016 (590-4572-2), DP-16(2-3):092016 (590-4572-17), (590-4572-A-2-H DU) and (590-4572-A-17-I DU).

Method NWTPH-Dx: Detected hydrocarbons in the diesel range appear to be due to oil overlap in the following samples: DP-13(0-1):092016 (590-4572-14) and DP-23(1-2):092116 (590-4572-24).

The following samples were analyzed outside of analytical holding time: DP-1(0.5-1.5):092016 (590-4572-1), DP-1(3-4):092016 (590-4572-2), DP-13(0-1):092016 (590-4572-14), DP-16(2-3):092016 (590-4572-17), DP-19(1.5-2.5):092116 (590-4572-20), DP-20(1-2):092116 (590-4572-21), DP-21(1-2):092116 (590-4572-22), DP-22(2-3):092116 (590-4572-23) and DP-23(1-2):092116 (590-4572-24).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Job ID: 590-4572-2 (Continued)

Laboratory: TestAmerica Spokane (Continued)

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-4572-1	DP-1(0.5-1.5):092016	Solid	09/20/16 08:50	09/23/16 12:10
590-4572-2	DP-1(3-4):092016	Solid	09/20/16 09:00	09/23/16 12:10
590-4572-3	DP-2(0.5-1.5):092016	Solid	09/20/16 09:20	09/23/16 12:10
590-4572-4	DP-3(0.5-1.5):092016	Solid	09/20/16 09:50	09/23/16 12:10
590-4572-14	DP-13(0-1):092016	Solid	09/20/16 14:40	09/23/16 12:10
590-4572-16	DP-15(0.5-1.5):092016	Solid	09/20/16 15:30	09/23/16 12:10
590-4572-17	DP-16(2-3):092016	Solid	09/20/16 15:50	09/23/16 12:10
590-4572-18	DP-17(1-2):092116	Solid	09/21/16 09:05	09/23/16 12:10
590-4572-20	DP-19(1.5-2.5):092116	Solid	09/21/16 10:20	09/23/16 12:10
590-4572-21	DP-20(1-2):092116	Solid	09/21/16 10:40	09/23/16 12:10
590-4572-22	DP-21(1-2):092116	Solid	09/21/16 11:00	09/23/16 12:10
590-4572-23	DP-22(2-3):092116	Solid	09/21/16 11:40	09/23/16 12:10
590-4572-24	DP-23(1-2):092116	Solid	09/21/16 12:15	09/23/16 12:10
590-4572-26	DP-25(1-2):092116	Solid	09/21/16 13:00	09/23/16 12:10
590-4572-35	DP-33(1-2):092216	Solid	09/22/16 09:55	09/23/16 12:10
590-4572-37	DP-35(1.5-2.5):092216	Solid	09/22/16 11:20	09/23/16 12:10
590-4572-39	DP-36(2-3):092216	Solid	09/22/16 11:50	09/23/16 12:10
590-4572-41	DP-38(2-3):092216	Solid	09/22/16 13:25	09/23/16 12:10

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

GC Semi VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample ID: DP-1(0.5-1.5):092016

Lab Sample ID: 590-4572-1

Date Collected: 09/20/16 08:50
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 91.6

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 17:17	1
PCB-1221	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 17:17	1
PCB-1232	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 17:17	1
PCB-1242	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 17:17	1
PCB-1248	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 17:17	1
PCB-1254	**23**		11		ug/Kg	☼	10/06/16 10:58	10/06/16 17:17	1
PCB-1260	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 17:17	1
PCB-1268	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 17:17	1
PCB-1262	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*44*		*31 - 127*	*10/06/16 10:58*	*10/06/16 17:17*	*1*
DCB Decachlorobiphenyl (Surr)	*58*		*20 - 150*	*10/06/16 10:58*	*10/06/16 17:17*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**1000**	**H**	110		mg/Kg	☼	10/06/16 13:42	10/07/16 15:39	10
Residual Range Organics (RRO) (C25-C36)	**1800**	**H**	270		mg/Kg	☼	10/06/16 13:42	10/07/16 15:39	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*125*		*50 - 150*	*10/06/16 13:42*	*10/07/16 15:39*	*10*
n-Triacontane-d62	*95*		*50 - 150*	*10/06/16 13:42*	*10/07/16 15:39*	*10*

Client Sample ID: DP-1(3-4):092016

Lab Sample ID: 590-4572-2

Date Collected: 09/20/16 09:00
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.6

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10		ug/Kg	☼	10/06/16 10:58	10/06/16 17:38	1
PCB-1221	ND		10		ug/Kg	☼	10/06/16 10:58	10/06/16 17:38	1
PCB-1232	ND		10		ug/Kg	☼	10/06/16 10:58	10/06/16 17:38	1
PCB-1242	ND		10		ug/Kg	☼	10/06/16 10:58	10/06/16 17:38	1
PCB-1248	ND		10		ug/Kg	☼	10/06/16 10:58	10/06/16 17:38	1
PCB-1254	ND		10		ug/Kg	☼	10/06/16 10:58	10/06/16 17:38	1
PCB-1260	ND		10		ug/Kg	☼	10/06/16 10:58	10/06/16 17:38	1
PCB-1268	ND		10		ug/Kg	☼	10/06/16 10:58	10/06/16 17:38	1
PCB-1262	ND		10		ug/Kg	☼	10/06/16 10:58	10/06/16 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*45*	*p*	*31 - 127*	*10/06/16 10:58*	*10/06/16 17:38*	*1*
DCB Decachlorobiphenyl (Surr)	*40*		*20 - 150*	*10/06/16 10:58*	*10/06/16 17:38*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**3000**	**H**	100		mg/Kg	☼	10/06/16 13:42	10/07/16 15:56	10
Residual Range Organics (RRO) (C25-C36)	**4200**	**H**	260		mg/Kg	☼	10/06/16 13:42	10/07/16 15:56	10

Client Sample ID: DP-1(3-4):092016

Lab Sample ID: 590-4572-2
Date Collected: 09/20/16 09:00
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.6

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*145*		*50 - 150*	*10/06/16 13:42*	*10/07/16 15:56*	*10*
n-Triacontane-d62	*76*		*50 - 150*	*10/06/16 13:42*	*10/07/16 15:56*	*10*

Client Sample ID: DP-2(0.5-1.5):092016

Lab Sample ID: 590-4572-3
Date Collected: 09/20/16 09:20
Matrix: Solid
Date Received: 09/23/16 12:10

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.15		mg/L		10/11/16 09:18	10/12/16 13:01	1

Client Sample ID: DP-3(0.5-1.5):092016

Lab Sample ID: 590-4572-4
Date Collected: 09/20/16 09:50
Matrix: Solid
Date Received: 09/23/16 12:10

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.26**		0.030		mg/L		10/11/16 09:18	10/12/16 13:21	1

Client Sample ID: DP-13(0-1):092016

Lab Sample ID: 590-4572-14
Date Collected: 09/20/16 14:40
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 96.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20		ug/Kg	☼	10/06/16 10:58	10/06/16 17:59	1
PCB-1221	ND		20		ug/Kg	☼	10/06/16 10:58	10/06/16 17:59	1
PCB-1232	ND		20		ug/Kg	☼	10/06/16 10:58	10/06/16 17:59	1
PCB-1242	ND		20		ug/Kg	☼	10/06/16 10:58	10/06/16 17:59	1
PCB-1248	ND		20		ug/Kg	☼	10/06/16 10:58	10/06/16 17:59	1
PCB-1254	ND		20		ug/Kg	☼	10/06/16 10:58	10/06/16 17:59	1
PCB-1260	ND		20		ug/Kg	☼	10/06/16 10:58	10/06/16 17:59	1
PCB-1268	ND		20		ug/Kg	☼	10/06/16 10:58	10/06/16 17:59	1
PCB-1262	ND		20		ug/Kg	☼	10/06/16 10:58	10/06/16 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*22*	*X*	*31 - 127*	*10/06/16 10:58*	*10/06/16 17:59*	*1*
DCB Decachlorobiphenyl (Surr)	*21*		*20 - 150*	*10/06/16 10:58*	*10/06/16 17:59*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**70**	**H**	49		mg/Kg	☼	10/06/16 13:42	10/07/16 16:13	1
Residual Range Organics (RRO) (C25-C36)	**700**	**H**	120		mg/Kg	☼	10/06/16 13:42	10/07/16 16:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*96*		*50 - 150*	*10/06/16 13:42*	*10/07/16 16:13*	*1*
n-Triacontane-d62	*101*		*50 - 150*	*10/06/16 13:42*	*10/07/16 16:13*	*1*

Client Sample ID: DP-15(0.5-1.5):092016

Lab Sample ID: 590-4572-16

Date Collected: 09/20/16 15:30

Matrix: Solid

Date Received: 09/23/16 12:10

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.030		mg/L		10/11/16 09:18	10/12/16 13:25	1

Client Sample ID: DP-16(2-3):092016

Lab Sample ID: 590-4572-17

Date Collected: 09/20/16 15:50

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 91.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,1,1-Trichloroethane	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,1,2,2-Tetrachloroethane	ND	H	32		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,1,2-Trichloroethane	ND	H	39		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,1-Dichloroethane	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,1-Dichloroethene	ND	H	65		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,1-Dichloropropene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,2,3-Trichlorobenzene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,2,3-Trichloropropane	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,2,4-Trichlorobenzene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,2,4-Trimethylbenzene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,2-Dibromo-3-Chloropropane	ND	H	650		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,2-Dibromoethane	ND	H	52		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,2-Dichlorobenzene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,2-Dichloroethane	ND	H	52		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,2-Dichloropropane	ND	H	52		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,3,5-Trimethylbenzene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,3-Dichlorobenzene	ND	H	190		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,3-Dichloropropane	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
1,4-Dichlorobenzene	ND	H	190		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
2,2-Dichloropropane	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
2-Chlorotoluene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
4-Chlorotoluene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
4-Isopropyltoluene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Benzene	ND	H	52		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Bromobenzene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Bromochloromethane	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Bromodichloromethane	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Bromoform	ND	H	320		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Bromomethane	ND	H	450		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Carbon tetrachloride	ND	H	65		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Chlorobenzene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Chloroethane	ND	H	1300		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Chloroform	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Chloromethane	ND	H	320		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
cis-1,2-Dichloroethene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
cis-1,3-Dichloropropene	ND	H	52		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Dibromochloromethane	ND	H	65		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Dibromomethane	ND	H	190		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Dichlorodifluoromethane	ND	H	650		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Ethylbenzene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Hexachlorobutadiene	ND	H	260		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1

Client Sample ID: DP-16(2-3):092016
Date Collected: 09/20/16 15:50
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-17
Matrix: Solid
Percent Solids: 91.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Methyl tert-butyl ether	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Methylene Chloride	**3200**	**H**	81		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
m-Xylene & p-Xylene	ND	H	650		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Naphthalene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
n-Butylbenzene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
N-Propylbenzene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
o-Xylene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
sec-Butylbenzene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Styrene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
t-Butylbenzene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Tetrachloroethene	ND	H	65		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Toluene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
trans-1,2-Dichloroethene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
trans-1,3-Dichloropropene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Trichloroethene	ND	H	78		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Trichlorofluoromethane	ND	H	650		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1
Vinyl chloride	ND	H	52		ug/Kg	☼	10/10/16 10:00	10/10/16 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 121*	*10/10/16 10:00*	*10/10/16 15:00*	*1*
4-Bromofluorobenzene (Surr)	*96*		*79 - 120*	*10/10/16 10:00*	*10/10/16 15:00*	*1*
Dibromofluoromethane (Surr)	*94*		*78 - 118*	*10/10/16 10:00*	*10/10/16 15:00*	*1*
Toluene-d8 (Surr)	*104*		*79 - 119*	*10/10/16 10:00*	*10/10/16 15:00*	*1*
Trifluorotoluene (Surr)	*95*		*52 - 152*	*10/10/16 10:00*	*10/10/16 15:00*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 18:19	1
PCB-1221	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 18:19	1
PCB-1232	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 18:19	1
PCB-1242	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 18:19	1
PCB-1248	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 18:19	1
PCB-1254	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 18:19	1
PCB-1260	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 18:19	1
PCB-1268	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 18:19	1
PCB-1262	ND		11		ug/Kg	☼	10/06/16 10:58	10/06/16 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*31 - 127*	*10/06/16 10:58*	*10/06/16 18:19*	*1*
DCB Decachlorobiphenyl (Surr)	*29*		*20 - 150*	*10/06/16 10:58*	*10/06/16 18:19*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**7400**	**H**	210		mg/Kg	☼	10/06/16 13:42	10/07/16 16:31	20
Residual Range Organics (RRO) (C25-C36)	**9700**	**H**	530		mg/Kg	☼	10/06/16 13:42	10/07/16 16:31	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*318*	*X*	*50 - 150*	*10/06/16 13:42*	*10/07/16 16:31*	*20*

Client Sample ID: DP-16(2-3):092016

Lab Sample ID: 590-4572-17

Date Collected: 09/20/16 15:50
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 91.6

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Triacontane-d62	*197*	*X*	*50 - 150*	*10/06/16 13:42*	*10/07/16 16:31*	*20*

Client Sample ID: DP-17(1-2):092116

Lab Sample ID: 590-4572-18

Date Collected: 09/21/16 09:05
Matrix: Solid
Date Received: 09/23/16 12:10

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.36**		0.030		mg/L		10/11/16 09:18	10/12/16 13:28	1

Client Sample ID: DP-19(1.5-2.5):092116

Lab Sample ID: 590-4572-20

Date Collected: 09/21/16 10:20
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 94.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		52		ug/Kg	☼	10/06/16 10:58	10/06/16 18:40	1
PCB-1221	ND		52		ug/Kg	☼	10/06/16 10:58	10/06/16 18:40	1
PCB-1232	ND		52		ug/Kg	☼	10/06/16 10:58	10/06/16 18:40	1
PCB-1242	ND		52		ug/Kg	☼	10/06/16 10:58	10/06/16 18:40	1
PCB-1248	ND		52		ug/Kg	☼	10/06/16 10:58	10/06/16 18:40	1
PCB-1254	ND		52		ug/Kg	☼	10/06/16 10:58	10/06/16 18:40	1
PCB-1260	ND		52		ug/Kg	☼	10/06/16 10:58	10/06/16 18:40	1
PCB-1268	ND		52		ug/Kg	☼	10/06/16 10:58	10/06/16 18:40	1
PCB-1262	ND		52		ug/Kg	☼	10/06/16 10:58	10/06/16 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*51*		*31 - 127*	*10/06/16 10:58*	*10/06/16 18:40*	*1*
DCB Decachlorobiphenyl (Surr)	*45*		*20 - 150*	*10/06/16 10:58*	*10/06/16 18:40*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND	H	510		mg/Kg	☼	10/06/16 13:42	10/07/16 13:18	10
Residual Range Organics (RRO) (C25-C36)	**2200**	**H**	1300		mg/Kg	☼	10/06/16 13:42	10/07/16 13:18	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*96*		*50 - 150*	*10/06/16 13:42*	*10/07/16 13:18*	*10*
n-Triacontane-d62	*90*		*50 - 150*	*10/06/16 13:42*	*10/07/16 13:18*	*10*

Client Sample ID: DP-20(1-2):092116

Lab Sample ID: 590-4572-21

Date Collected: 09/21/16 10:40
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 98.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg	☼	10/06/16 10:58	10/06/16 19:00	1
PCB-1221	ND		50		ug/Kg	☼	10/06/16 10:58	10/06/16 19:00	1
PCB-1232	ND		50		ug/Kg	☼	10/06/16 10:58	10/06/16 19:00	1
PCB-1242	ND		50		ug/Kg	☼	10/06/16 10:58	10/06/16 19:00	1

Client Sample ID: DP-20(1-2):092116

Lab Sample ID: 590-4572-21

Date Collected: 09/21/16 10:40
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 98.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	ND		50		ug/Kg	☼	10/06/16 10:58	10/06/16 19:00	1
PCB-1254	ND		50		ug/Kg	☼	10/06/16 10:58	10/06/16 19:00	1
PCB-1260	ND		50		ug/Kg	☼	10/06/16 10:58	10/06/16 19:00	1
PCB-1268	ND		50		ug/Kg	☼	10/06/16 10:58	10/06/16 19:00	1
PCB-1262	ND		50		ug/Kg	☼	10/06/16 10:58	10/06/16 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*46*		*31 - 127*	*10/06/16 10:58*	*10/06/16 19:00*	*1*
DCB Decachlorobiphenyl (Surr)	*42*		*20 - 150*	*10/06/16 10:58*	*10/06/16 19:00*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND	H	500		mg/Kg	☼	10/06/16 13:42	10/07/16 13:32	10
Residual Range Organics (RRO) (C25-C36)	**5200**	**H**	1300		mg/Kg	☼	10/06/16 13:42	10/07/16 13:32	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*99*		*50 - 150*	*10/06/16 13:42*	*10/07/16 13:32*	*10*
n-Triacontane-d62	*83*		*50 - 150*	*10/06/16 13:42*	*10/07/16 13:32*	*10*

Client Sample ID: DP-21(1-2):092116

Lab Sample ID: 590-4572-22

Date Collected: 09/21/16 11:00
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 97.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:21	1
PCB-1221	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:21	1
PCB-1232	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:21	1
PCB-1242	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:21	1
PCB-1248	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:21	1
PCB-1254	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:21	1
PCB-1260	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:21	1
PCB-1268	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:21	1
PCB-1262	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*44*		*31 - 127*	*10/06/16 10:58*	*10/06/16 19:21*	*1*
DCB Decachlorobiphenyl (Surr)	*40*		*20 - 150*	*10/06/16 10:58*	*10/06/16 19:21*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND	H	500		mg/Kg	☼	10/06/16 13:42	10/07/16 14:09	10
Residual Range Organics (RRO) (C25-C36)	**3700**	**H**	1300		mg/Kg	☼	10/06/16 13:42	10/07/16 14:09	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*50 - 150*	*10/06/16 13:42*	*10/07/16 14:09*	*10*
n-Triacontane-d62	*70*		*50 - 150*	*10/06/16 13:42*	*10/07/16 14:09*	*10*

Client Sample ID: DP-22(2-3):092116
Date Collected: 09/21/16 11:40
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-23
Matrix: Solid
Percent Solids: 96.7

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:42	1
PCB-1221	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:42	1
PCB-1232	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:42	1
PCB-1242	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:42	1
PCB-1248	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:42	1
PCB-1254	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:42	1
PCB-1260	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:42	1
PCB-1268	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:42	1
PCB-1262	ND		51		ug/Kg	☼	10/06/16 10:58	10/06/16 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*46*		*31 - 127*	*10/06/16 10:58*	*10/06/16 19:42*	*1*
DCB Decachlorobiphenyl (Surr)	*41*		*20 - 150*	*10/06/16 10:58*	*10/06/16 19:42*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND	H	510		mg/Kg	☼	10/06/16 13:42	10/07/16 14:27	10
Residual Range Organics (RRO) (C25-C36)	**4900**	**H**	1300		mg/Kg	☼	10/06/16 13:42	10/07/16 14:27	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*98*		*50 - 150*	*10/06/16 13:42*	*10/07/16 14:27*	*10*
n-Triacontane-d62	*84*		*50 - 150*	*10/06/16 13:42*	*10/07/16 14:27*	*10*

Client Sample ID: DP-23(1-2):092116
Date Collected: 09/21/16 12:15
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-24
Matrix: Solid
Percent Solids: 98.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,1,1-Trichloroethane	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,1,2,2-Tetrachloroethane	ND	H	17		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,1,2-Trichloroethane	ND	H	20		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,1-Dichloroethane	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,1-Dichloroethene	ND	H	33		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,1-Dichloropropene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,2,3-Trichlorobenzene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,2,3-Trichloropropane	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,2,4-Trichlorobenzene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,2,4-Trimethylbenzene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,2-Dibromo-3-Chloropropane	ND	H	330		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,2-Dibromoethane	ND	H	26		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,2-Dichlorobenzene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,2-Dichloroethane	ND	H	26		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,2-Dichloropropane	ND	H	26		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,3,5-Trimethylbenzene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,3-Dichlorobenzene	ND	H	99		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,3-Dichloropropane	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
1,4-Dichlorobenzene	ND	H	99		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-2

Client Sample ID: DP-23(1-2):092116
Date Collected: 09/21/16 12:15
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-24
Matrix: Solid
Percent Solids: 98.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
2-Chlorotoluene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
4-Chlorotoluene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
4-Isopropyltoluene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Benzene	**26**	**H**	26		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Bromobenzene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Bromochloromethane	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Bromodichloromethane	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Bromoform	ND	H	170		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Bromomethane	ND	H	230		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Carbon tetrachloride	ND	H	33		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Chlorobenzene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Chloroethane	ND	H	660		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Chloroform	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Chloromethane	ND	H	170		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
cis-1,2-Dichloroethene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
cis-1,3-Dichloropropene	ND	H	26		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Dibromochloromethane	ND	H	33		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Dibromomethane	ND	H	99		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Dichlorodifluoromethane	ND	H	330		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Ethylbenzene	**110**	**H**	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Hexachlorobutadiene	ND	H	130		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Isopropylbenzene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Methyl tert-butyl ether	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Methylene Chloride	**840**	**H**	41		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
m-Xylene & p-Xylene	**430**	**H**	330		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Naphthalene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
n-Butylbenzene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
N-Propylbenzene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
o-Xylene	**120**	**H**	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
sec-Butylbenzene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Styrene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
t-Butylbenzene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Tetrachloroethene	ND	H	33		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Toluene	**490**	**H**	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
trans-1,2-Dichloroethene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
trans-1,3-Dichloropropene	ND	H	66		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Trichloroethene	ND	H	40		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Trichlorofluoromethane	ND	H	330		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1
Vinyl chloride	ND	H	26		ug/Kg	☼	10/10/16 10:00	10/10/16 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*81 - 121*	*10/10/16 10:00*	*10/10/16 15:27*	*1*
4-Bromofluorobenzene (Surr)	*99*		*79 - 120*	*10/10/16 10:00*	*10/10/16 15:27*	*1*
Dibromofluoromethane (Surr)	*98*		*78 - 118*	*10/10/16 10:00*	*10/10/16 15:27*	*1*
Toluene-d8 (Surr)	*104*		*79 - 119*	*10/10/16 10:00*	*10/10/16 15:27*	*1*
Trifluorotoluene (Surr)	*96*		*52 - 152*	*10/10/16 10:00*	*10/10/16 15:27*	*1*

Client Sample ID: DP-23(1-2):092116

Lab Sample ID: 590-4572-24
Date Collected: 09/21/16 12:15
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 98.3

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg	☼	10/06/16 10:58	10/06/16 20:02	1
PCB-1221	ND		49		ug/Kg	☼	10/06/16 10:58	10/06/16 20:02	1
PCB-1232	ND		49		ug/Kg	☼	10/06/16 10:58	10/06/16 20:02	1
PCB-1242	ND		49		ug/Kg	☼	10/06/16 10:58	10/06/16 20:02	1
PCB-1248	ND		49		ug/Kg	☼	10/06/16 10:58	10/06/16 20:02	1
PCB-1254	ND		49		ug/Kg	☼	10/06/16 10:58	10/06/16 20:02	1
PCB-1260	ND		49		ug/Kg	☼	10/06/16 10:58	10/06/16 20:02	1
PCB-1268	ND		49		ug/Kg	☼	10/06/16 10:58	10/06/16 20:02	1
PCB-1262	ND		49		ug/Kg	☼	10/06/16 10:58	10/06/16 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*50*		*31 - 127*	*10/06/16 10:58*	*10/06/16 20:02*	*1*
DCB Decachlorobiphenyl (Surr)	*51*		*20 - 150*	*10/06/16 10:58*	*10/06/16 20:02*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	990	H	490		mg/Kg	☼	10/06/16 13:42	10/07/16 14:45	10
Residual Range Organics (RRO) (C25-C36)	10000	H	1200		mg/Kg	☼	10/06/16 13:42	10/07/16 14:45	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*110*		*50 - 150*	*10/06/16 13:42*	*10/07/16 14:45*	*10*
n-Triacontane-d62	*103*		*50 - 150*	*10/06/16 13:42*	*10/07/16 14:45*	*10*

Client Sample ID: DP-25(1-2):092116

Lab Sample ID: 590-4572-26
Date Collected: 09/21/16 13:00
Matrix: Solid
Date Received: 09/23/16 12:10

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.41		0.030		mg/L		10/11/16 09:18	10/12/16 13:40	1

Client Sample ID: DP-33(1-2):092216

Lab Sample ID: 590-4572-35
Date Collected: 09/22/16 09:55
Matrix: Solid
Date Received: 09/23/16 12:10

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.28		0.030		mg/L		10/11/16 09:18	10/12/16 13:44	1

Client Sample ID: DP-35(1.5-2.5):092216

Lab Sample ID: 590-4572-37
Date Collected: 09/22/16 11:20
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:23	1
PCB-1221	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:23	1
PCB-1232	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:23	1
PCB-1242	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:23	1

Client Sample ID: DP-35(1.5-2.5):092216
Date Collected: 09/22/16 11:20
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-37
Matrix: Solid
Percent Solids: 93.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:23	1
PCB-1254	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:23	1
PCB-1260	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:23	1
PCB-1268	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:23	1
PCB-1262	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*44*		*31 - 127*	*10/06/16 10:58*	*10/06/16 20:23*	*1*
DCB Decachlorobiphenyl (Surr)	*37*		*20 - 150*	*10/06/16 10:58*	*10/06/16 20:23*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		510		mg/Kg	☼	10/06/16 13:42	10/07/16 15:03	10
Residual Range Organics (RRO) (C25-C36)	**2500**		1300		mg/Kg	☼	10/06/16 13:42	10/07/16 15:03	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*96*		*50 - 150*	*10/06/16 13:42*	*10/07/16 15:03*	*10*
n-Triacontane-d62	*93*		*50 - 150*	*10/06/16 13:42*	*10/07/16 15:03*	*10*

Client Sample ID: DP-36(2-3):092216
Date Collected: 09/22/16 11:50
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-39
Matrix: Solid
Percent Solids: 93.0

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:43	1
PCB-1221	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:43	1
PCB-1232	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:43	1
PCB-1242	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:43	1
PCB-1248	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:43	1
PCB-1254	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:43	1
PCB-1260	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:43	1
PCB-1268	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:43	1
PCB-1262	ND		53		ug/Kg	☼	10/06/16 10:58	10/06/16 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*55*		*31 - 127*	*10/06/16 10:58*	*10/06/16 20:43*	*1*
DCB Decachlorobiphenyl (Surr)	*39*		*20 - 150*	*10/06/16 10:58*	*10/06/16 20:43*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		490		mg/Kg	☼	10/06/16 13:42	10/07/16 15:21	10
Residual Range Organics (RRO) (C25-C36)	**3000**		1200		mg/Kg	☼	10/06/16 13:42	10/07/16 15:21	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*87*		*50 - 150*	*10/06/16 13:42*	*10/07/16 15:21*	*10*
n-Triacontane-d62	*82*		*50 - 150*	*10/06/16 13:42*	*10/07/16 15:21*	*10*

Client Sample Results

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-2

Client Sample ID: DP-38(2-3):092216
Date Collected: 09/22/16 13:25
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-41
Matrix: Solid

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.1		0.030		mg/L		10/11/16 09:18	10/12/16 13:48	1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-229455/1-A
Matrix: Solid
Analysis Batch: 229461

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 229455

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,1,1-Trichloroethane	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,1,2,2-Tetrachloroethane	ND		10		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,1,2-Trichloroethane	ND		12		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,1-Dichloroethane	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,1-Dichloroethene	ND		20		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,1-Dichloropropene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,2,3-Trichlorobenzene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,2,3-Trichloropropane	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,2,4-Trichlorobenzene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,2,4-Trimethylbenzene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,2-Dibromo-3-Chloropropane	ND		200		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,2-Dibromoethane	ND		16		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,2-Dichlorobenzene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,2-Dichloroethane	ND		16		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,2-Dichloropropane	ND		16		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,3,5-Trimethylbenzene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,3-Dichlorobenzene	ND		60		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,3-Dichloropropane	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
1,4-Dichlorobenzene	ND		60		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
2,2-Dichloropropane	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
2-Chlorotoluene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
4-Chlorotoluene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
4-Isopropyltoluene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Benzene	ND		16		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Bromobenzene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Bromochloromethane	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Bromodichloromethane	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Bromoform	ND		100		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Bromomethane	ND		140		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Carbon tetrachloride	ND		20		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Chlorobenzene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Chloroethane	ND		400		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Chloroform	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Chloromethane	ND		100		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
cis-1,2-Dichloroethene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
cis-1,3-Dichloropropene	ND		16		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Dibromochloromethane	ND		20		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Dibromomethane	ND		60		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Dichlorodifluoromethane	ND		200		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Ethylbenzene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Hexachlorobutadiene	ND		80		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Isopropylbenzene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Methyl tert-butyl ether	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Methylene Chloride	ND		25		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
m-Xylene & p-Xylene	ND		200		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Naphthalene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
n-Butylbenzene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 580-229455/1-A
Matrix: Solid
Analysis Batch: 229461

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 229455

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
o-Xylene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
sec-Butylbenzene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Styrene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
t-Butylbenzene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Tetrachloroethene	ND		20		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Toluene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
trans-1,2-Dichloroethene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
trans-1,3-Dichloropropene	ND		40		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Trichloroethene	ND		24		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Trichlorofluoromethane	ND		200		ug/Kg		10/10/16 10:00	10/10/16 10:29	1
Vinyl chloride	ND		16		ug/Kg		10/10/16 10:00	10/10/16 10:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*81 - 121*	*10/10/16 10:00*	*10/10/16 10:29*	*1*
4-Bromofluorobenzene (Surr)	*98*		*79 - 120*	*10/10/16 10:00*	*10/10/16 10:29*	*1*
Dibromofluoromethane (Surr)	*95*		*78 - 118*	*10/10/16 10:00*	*10/10/16 10:29*	*1*
Toluene-d8 (Surr)	*104*		*79 - 119*	*10/10/16 10:00*	*10/10/16 10:29*	*1*
Trifluorotoluene (Surr)	*97*		*52 - 152*	*10/10/16 10:00*	*10/10/16 10:29*	*1*

Lab Sample ID: LCS 580-229455/2-A
Matrix: Solid
Analysis Batch: 229461

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 229455

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	803	754		ug/Kg		94	65 - 123
1,1,1-Trichloroethane	803	717		ug/Kg		89	63 - 129
1,1,2,2-Tetrachloroethane	801	739		ug/Kg		92	65 - 125
1,1,2-Trichloroethane	802	741		ug/Kg		92	69 - 117
1,1-Dichloroethane	800	742		ug/Kg		93	70 - 128
1,1-Dichloroethene	807	812		ug/Kg		101	58 - 123
1,1-Dichloropropene	801	694		ug/Kg		87	67 - 125
1,2,3-Trichlorobenzene	801	772		ug/Kg		96	46 - 141
1,2,3-Trichloropropane	801	740		ug/Kg		92	61 - 130
1,2,4-Trichlorobenzene	800	706		ug/Kg		88	61 - 130
1,2,4-Trimethylbenzene	801	764		ug/Kg		95	61 - 124
1,2-Dibromo-3-Chloropropane	802	759		ug/Kg		95	46 - 132
1,2-Dibromoethane	801	731		ug/Kg		91	69 - 119
1,2-Dichlorobenzene	801	760		ug/Kg		95	69 - 119
1,2-Dichloroethane	801	683		ug/Kg		85	71 - 121
1,2-Dichloropropane	801	748		ug/Kg		93	69 - 125
1,3,5-Trimethylbenzene	801	770		ug/Kg		96	64 - 125
1,3-Dichlorobenzene	802	681		ug/Kg		85	70 - 119
1,3-Dichloropropane	802	758		ug/Kg		95	69 - 123
1,4-Dichlorobenzene	802	748		ug/Kg		93	71 - 117
2,2-Dichloropropane	800	678		ug/Kg		85	56 - 144
2-Chlorotoluene	800	798		ug/Kg		100	66 - 122
4-Chlorotoluene	802	775		ug/Kg		97	69 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-229455/2-A
Matrix: Solid
Analysis Batch: 229461

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 229455

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Isopropyltoluene	800	753		ug/Kg		94	63 - 126
Benzene	803	737		ug/Kg		92	70 - 118
Bromobenzene	800	760		ug/Kg		95	67 - 120
Bromochloromethane	802	705		ug/Kg		88	67 - 123
Bromodichloromethane	803	720		ug/Kg		90	75 - 119
Bromoform	802	720		ug/Kg		90	50 - 124
Bromomethane	800	823		ug/Kg		103	41 - 148
Carbon tetrachloride	802	715		ug/Kg		89	67 - 126
Chlorobenzene	803	774		ug/Kg		96	68 - 120
Chloroethane	800	701		ug/Kg		88	48 - 142
Chloroform	800	689		ug/Kg		86	72 - 125
Chloromethane	800	716		ug/Kg		89	46 - 136
cis-1,2-Dichloroethene	801	699		ug/Kg		87	70 - 119
cis-1,3-Dichloropropene	802	780		ug/Kg		97	69 - 129
Dibromochloromethane	801	719		ug/Kg		90	64 - 129
Dibromomethane	803	661		ug/Kg		82	64 - 126
Dichlorodifluoromethane	800	760		ug/Kg		95	38 - 140
Ethylbenzene	803	755		ug/Kg		94	66 - 119
Hexachlorobutadiene	801	783		ug/Kg		98	58 - 128
Isopropylbenzene	801	753		ug/Kg		94	67 - 127
Methyl tert-butyl ether	801	653		ug/Kg		81	58 - 134
Methylene Chloride	804	715		ug/Kg		89	57 - 129
m-Xylene & p-Xylene	802	748		ug/Kg		93	69 - 126
Naphthalene	801	753		ug/Kg		94	45 - 141
n-Butylbenzene	801	745		ug/Kg		93	63 - 128
N-Propylbenzene	800	780		ug/Kg		98	67 - 127
o-Xylene	801	734		ug/Kg		92	66 - 127
sec-Butylbenzene	801	788		ug/Kg		98	62 - 128
Styrene	801	733		ug/Kg		91	68 - 120
t-Butylbenzene	800	779		ug/Kg		97	65 - 125
Tetrachloroethene	802	702		ug/Kg		88	63 - 123
Toluene	801	742		ug/Kg		93	67 - 119
trans-1,2-Dichloroethene	802	697		ug/Kg		87	63 - 122
trans-1,3-Dichloropropene	801	716		ug/Kg		89	65 - 129
Trichloroethene	802	774		ug/Kg		97	68 - 118
Trichlorofluoromethane	800	805		ug/Kg		101	59 - 137
Vinyl chloride	800	765		ug/Kg		96	43 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 121*
4-Bromofluorobenzene (Surr)	*98*		*79 - 120*
Dibromofluoromethane (Surr)	*96*		*78 - 118*
Toluene-d8 (Surr)	*103*		*79 - 119*
Trifluorotoluene (Surr)	*96*		*52 - 152*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-229455/3-A
Matrix: Solid
Analysis Batch: 229461

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 229455

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	803	794		ug/Kg		99	65 - 123	5	20
1,1,1-Trichloroethane	803	727		ug/Kg		91	63 - 129	1	20
1,1,2,2-Tetrachloroethane	801	775		ug/Kg		97	65 - 125	5	22
1,1,2-Trichloroethane	802	761		ug/Kg		95	69 - 117	3	18
1,1-Dichloroethane	800	785		ug/Kg		98	70 - 128	6	21
1,1-Dichloroethene	807	851		ug/Kg		105	58 - 123	5	23
1,1-Dichloropropene	801	723		ug/Kg		90	67 - 125	4	16
1,2,3-Trichlorobenzene	801	799		ug/Kg		100	46 - 141	3	33
1,2,3-Trichloropropane	801	807		ug/Kg		101	61 - 130	9	23
1,2,4-Trichlorobenzene	800	758		ug/Kg		95	61 - 130	7	22
1,2,4-Trimethylbenzene	801	781		ug/Kg		98	61 - 124	2	18
1,2-Dibromo-3-Chloropropane	802	851		ug/Kg		106	46 - 132	11	27
1,2-Dibromoethane	801	771		ug/Kg		96	69 - 119	5	15
1,2-Dichlorobenzene	801	788		ug/Kg		98	69 - 119	4	17
1,2-Dichloroethane	801	699		ug/Kg		87	71 - 121	2	18
1,2-Dichloropropane	801	783		ug/Kg		98	69 - 125	5	15
1,3,5-Trimethylbenzene	801	799		ug/Kg		100	64 - 125	4	18
1,3-Dichlorobenzene	802	698		ug/Kg		87	70 - 119	2	17
1,3-Dichloropropane	802	807		ug/Kg		101	69 - 123	6	19
1,4-Dichlorobenzene	802	777		ug/Kg		97	71 - 117	4	18
2,2-Dichloropropane	800	644		ug/Kg		81	56 - 144	5	21
2-Chlorotoluene	800	799		ug/Kg		100	66 - 122	0	18
4-Chlorotoluene	802	806		ug/Kg		101	69 - 122	4	18
4-Isopropyltoluene	800	784		ug/Kg		98	63 - 126	4	18
Benzene	803	782		ug/Kg		97	70 - 118	6	19
Bromobenzene	800	812		ug/Kg		101	67 - 120	7	19
Bromochloromethane	802	713		ug/Kg		89	67 - 123	1	19
Bromodichloromethane	803	761		ug/Kg		95	75 - 119	6	19
Bromoform	802	769		ug/Kg		96	50 - 124	7	16
Bromomethane	800	847		ug/Kg		106	41 - 148	3	29
Carbon tetrachloride	802	742		ug/Kg		93	67 - 126	4	19
Chlorobenzene	803	802		ug/Kg		100	68 - 120	4	21
Chloroethane	800	735		ug/Kg		92	48 - 142	5	25
Chloroform	800	745		ug/Kg		93	72 - 125	8	17
Chloromethane	800	720		ug/Kg		90	46 - 136	1	26
cis-1,2-Dichloroethene	801	717		ug/Kg		90	70 - 119	3	19
cis-1,3-Dichloropropene	802	811		ug/Kg		101	69 - 129	4	19
Dibromochloromethane	801	760		ug/Kg		95	64 - 129	6	14
Dibromomethane	803	671		ug/Kg		84	64 - 126	1	18
Dichlorodifluoromethane	800	774		ug/Kg		97	38 - 140	2	26
Ethylbenzene	803	780		ug/Kg		97	66 - 119	3	23
Hexachlorobutadiene	801	852		ug/Kg		106	58 - 128	8	29
Isopropylbenzene	801	785		ug/Kg		98	67 - 127	4	20
Methyl tert-butyl ether	801	680		ug/Kg		85	58 - 134	4	20
Methylene Chloride	804	726		ug/Kg		90	57 - 129	2	21
m-Xylene & p-Xylene	802	775		ug/Kg		97	69 - 126	4	23
Naphthalene	801	822		ug/Kg		103	45 - 141	9	34
n-Butylbenzene	801	767		ug/Kg		96	63 - 128	3	17

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-229455/3-A
Matrix: Solid
Analysis Batch: 229461

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 229455

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
N-Propylbenzene			800	818		ug/Kg		102	67 - 127	5	20
o-Xylene			801	773		ug/Kg		97	66 - 127	5	22
sec-Butylbenzene			801	802		ug/Kg		100	62 - 128	2	17
Styrene			801	767		ug/Kg		96	68 - 120	5	21
t-Butylbenzene			800	821		ug/Kg		103	65 - 125	5	20
Tetrachloroethene			802	715		ug/Kg		89	63 - 123	2	20
Toluene			801	777		ug/Kg		97	67 - 119	5	19
trans-1,2-Dichloroethene			802	724		ug/Kg		90	63 - 122	4	18
trans-1,3-Dichloropropene			801	772		ug/Kg		96	65 - 129	8	20
Trichloroethene			802	799		ug/Kg		100	68 - 118	3	17
Trichlorofluoromethane			800	830		ug/Kg		104	59 - 137	3	40
Vinyl chloride			800	734		ug/Kg		92	43 - 131	4	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*81 - 121*
4-Bromofluorobenzene (Surr)	*99*		*79 - 120*
Dibromofluoromethane (Surr)	*99*		*78 - 118*
Toluene-d8 (Surr)	*104*		*79 - 119*
Trifluorotoluene (Surr)	*96*		*52 - 152*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 590-8971/1-A
Matrix: Solid
Analysis Batch: 8964

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10		ug/Kg		10/06/16 10:58	10/06/16 15:55	1
PCB-1221	ND		10		ug/Kg		10/06/16 10:58	10/06/16 15:55	1
PCB-1232	ND		10		ug/Kg		10/06/16 10:58	10/06/16 15:55	1
PCB-1242	ND		10		ug/Kg		10/06/16 10:58	10/06/16 15:55	1
PCB-1248	ND		10		ug/Kg		10/06/16 10:58	10/06/16 15:55	1
PCB-1254	ND		10		ug/Kg		10/06/16 10:58	10/06/16 15:55	1
PCB-1260	ND		10		ug/Kg		10/06/16 10:58	10/06/16 15:55	1
PCB-1268	ND		10		ug/Kg		10/06/16 10:58	10/06/16 15:55	1
PCB-1262	ND		10		ug/Kg		10/06/16 10:58	10/06/16 15:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*31 - 127*	*10/06/16 10:58*	*10/06/16 15:55*	*1*
DCB Decachlorobiphenyl (Surr)	*85*		*20 - 150*	*10/06/16 10:58*	*10/06/16 15:55*	*1*

Lab Sample ID: LCS 590-8971/2-A
Matrix: Solid
Analysis Batch: 8964

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8971

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			66.7	47.7		ug/Kg		71	58 - 150		

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 590-8971/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 8964 — **Prep Batch: 8971**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1260			66.7	48.8		ug/Kg		73	52 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*70*		*31 - 127*
DCB Decachlorobiphenyl (Surr)	*76*		*20 - 150*

Lab Sample ID: 590-4572-1 MS — **Client Sample ID: DP-1(0.5-1.5):092016**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 8964 — **Prep Batch: 8971**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND		72.3	44.4		ug/Kg	☼	61	50.6 - 145		
PCB-1260	ND		72.3	43.4		ug/Kg	☼	60	57.6 - 120		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*45*		*31 - 127*
DCB Decachlorobiphenyl (Surr)	*53*		*20 - 150*

Lab Sample ID: 590-4572-1 MSD — **Client Sample ID: DP-1(0.5-1.5):092016**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 8964 — **Prep Batch: 8971**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		69.9	35.3	p	ug/Kg	☼	51	50.6 - 145	23	40
PCB-1260	ND		69.9	43.5		ug/Kg	☼	62	57.6 - 120	0	27.4

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*45*		*31 - 127*
DCB Decachlorobiphenyl (Surr)	*54*		*20 - 150*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 590-8975/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 8992 — **Prep Batch: 8975**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		10		mg/Kg		10/06/16 13:42	10/07/16 11:03	1
Residual Range Organics (RRO) (C25-C36)	ND		25		mg/Kg		10/06/16 13:42	10/07/16 11:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*95*		*50 - 150*	*10/06/16 13:42*	*10/07/16 11:03*	*1*
n-Triacontane-d62	*89*		*50 - 150*	*10/06/16 13:42*	*10/07/16 11:03*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 590-8975/2-A
Matrix: Solid
Analysis Batch: 8992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8975

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (DRO) (C10-C25)			67.1	67.0		mg/Kg		100	50 - 150		
Residual Range Organics (RRO) (C25-C36)			66.8	62.7		mg/Kg		94	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*102*		*50 - 150*
n-Triacontane-d62	*98*		*50 - 150*

Lab Sample ID: 590-4572-2 DU
Matrix: Solid
Analysis Batch: 8992

Client Sample ID: DP-1(3-4):092016
Prep Type: Total/NA
Prep Batch: 8975

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Diesel Range Organics (DRO) (C10-C25)	3000	H		2560		mg/Kg	☼			17	40
Residual Range Organics (RRO) (C25-C36)	4200	H		3520		mg/Kg	☼			17	40

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*137*		*50 - 150*
n-Triacontane-d62	*51*		*50 - 150*

Lab Sample ID: 590-4572-17 DU
Matrix: Solid
Analysis Batch: 8992

Client Sample ID: DP-16(2-3):092016
Prep Type: Total/NA
Prep Batch: 8975

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Diesel Range Organics (DRO) (C10-C25)	7400	H		6920		mg/Kg	☼			7	40
Residual Range Organics (RRO) (C25-C36)	9700	H		9180		mg/Kg	☼			6	40

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*191*	*X*	*50 - 150*
n-Triacontane-d62	*124*		*50 - 150*

Method: 6010C - Metals (ICP)

Lab Sample ID: LCS 590-9038/1-A
Matrix: Solid
Analysis Batch: 9071

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9038

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			1.00	0.987		mg/L		99	80 - 120		

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 590-9020/1-B
Matrix: Solid
Analysis Batch: 9071

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 9038

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.030		mg/L		10/11/16 09:18	10/12/16 12:58	1

Lab Sample ID: 590-4572-3 MS
Matrix: Solid
Analysis Batch: 9071

Client Sample ID: DP-2(0.5-1.5):092016
Prep Type: TCLP
Prep Batch: 9038

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	ND		5.00	4.92		mg/L		98	75 - 125		

Lab Sample ID: 590-4572-3 MSD
Matrix: Solid
Analysis Batch: 9071

Client Sample ID: DP-2(0.5-1.5):092016
Prep Type: TCLP
Prep Batch: 9038

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	ND		5.00	5.00		mg/L		100	75 - 125	2	20

Lab Sample ID: 590-4572-3 DU
Matrix: Solid
Analysis Batch: 9071

Client Sample ID: DP-2(0.5-1.5):092016
Prep Type: TCLP
Prep Batch: 9038

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	ND			ND		mg/L				NC	20

Client Sample ID: DP-1(0.5-1.5):092016

Lab Sample ID: 590-4572-1

Date Collected: 09/20/16 08:50

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.27 g	5 mL	8971	10/06/16 10:58	EAF	TAL SPK
Total/NA	Analysis	8082A		1			8964	10/06/16 17:17	NMI	TAL SPK
Total/NA	Prep	3550C			15.35 g	5 mL	8975	10/06/16 13:42	EAF	TAL SPK
Total/NA	Analysis	NWTPH-Dx		10			8992	10/07/16 15:39	NMI	TAL SPK

Client Sample ID: DP-1(3-4):092016

Lab Sample ID: 590-4572-2

Date Collected: 09/20/16 09:00

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.92 g	5 mL	8971	10/06/16 10:58	EAF	TAL SPK
Total/NA	Analysis	8082A		1			8964	10/06/16 17:38	NMI	TAL SPK
Total/NA	Prep	3550C			15.44 g	5 mL	8975	10/06/16 13:42	EAF	TAL SPK
Total/NA	Analysis	NWTPH-Dx		10			8992	10/07/16 15:56	NMI	TAL SPK

Client Sample ID: DP-2(0.5-1.5):092016

Lab Sample ID: 590-4572-3

Date Collected: 09/20/16 09:20

Matrix: Solid

Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			100.02 g	2000.01 mL	9020	10/10/16 09:06	JSP	TAL SPK
TCLP	Prep	3010A			10 mL	50 mL	9038	10/11/16 09:18	JSP	TAL SPK
TCLP	Analysis	6010C		1			9071	10/12/16 13:01	JSP	TAL SPK

Client Sample ID: DP-3(0.5-1.5):092016

Lab Sample ID: 590-4572-4

Date Collected: 09/20/16 09:50

Matrix: Solid

Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			100.00 g	2000.00 mL	9020	10/10/16 09:06	JSP	TAL SPK
TCLP	Prep	3010A			50 mL	50 mL	9038	10/11/16 09:18	JSP	TAL SPK
TCLP	Analysis	6010C		1			9071	10/12/16 13:21	JSP	TAL SPK

Client Sample ID: DP-13(0-1):092016

Lab Sample ID: 590-4572-14

Date Collected: 09/20/16 14:40

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 96.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			3.05 g	2 mL	8971	10/06/16 10:58	EAF	TAL SPK
Total/NA	Analysis	8082A		1			8964	10/06/16 17:59	NMI	TAL SPK
Total/NA	Prep	3550C			3.16 g	5 mL	8975	10/06/16 13:42	EAF	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1			8992	10/07/16 16:13	NMI	TAL SPK

Client Sample ID: DP-15(0.5-1.5):092016

Lab Sample ID: 590-4572-16

Date Collected: 09/20/16 15:30

Matrix: Solid

Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			100.09 g	2000.03 mL	9020	10/10/16 09:06	JSP	TAL SPK
TCLP	Prep	3010A			50 mL	50 mL	9038	10/11/16 09:18	JSP	TAL SPK
TCLP	Analysis	6010C		1			9071	10/12/16 13:25	JSP	TAL SPK

Client Sample ID: DP-16(2-3):092016

Lab Sample ID: 590-4572-17

Date Collected: 09/20/16 15:50

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3.473 g	10 mL	229455	10/10/16 10:00	JSM	TAL SEA
Total/NA	Analysis	8260C		1	1.075 mL	43 mL	229461	10/10/16 15:00	JSM	TAL SEA
Total/NA	Prep	3550C			15.19 g	5 mL	8971	10/06/16 10:58	EAF	TAL SPK
Total/NA	Analysis	8082A		1			8964	10/06/16 18:19	NMI	TAL SPK
Total/NA	Prep	3550C			15.35 g	5 mL	8975	10/06/16 13:42	EAF	TAL SPK
Total/NA	Analysis	NWTPH-Dx		20			8992	10/07/16 16:31	NMI	TAL SPK

Client Sample ID: DP-17(1-2):092116

Lab Sample ID: 590-4572-18

Date Collected: 09/21/16 09:05

Matrix: Solid

Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			100.03 g	2000.03 mL	9020	10/10/16 09:06	JSP	TAL SPK
TCLP	Prep	3010A			50 mL	50 mL	9038	10/11/16 09:18	JSP	TAL SPK
TCLP	Analysis	6010C		1			9071	10/12/16 13:28	JSP	TAL SPK

Client Sample ID: DP-19(1.5-2.5):092116

Lab Sample ID: 590-4572-20

Date Collected: 09/21/16 10:20

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			3.06 g	5 mL	8971	10/06/16 10:58	EAF	TAL SPK
Total/NA	Analysis	8082A		1			8964	10/06/16 18:40	NMI	TAL SPK
Total/NA	Prep	3550C			3.15 g	5 mL	8975	10/06/16 13:42	EAF	TAL SPK
Total/NA	Analysis	NWTPH-Dx		10			8992	10/07/16 13:18	NMI	TAL SPK

Client Sample ID: DP-20(1-2):092116

Lab Sample ID: 590-4572-21

Date Collected: 09/21/16 10:40

Matrix: Solid

Date Received: 09/23/16 12:10

Percent Solids: 98.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			3.04 g	5 mL	8971	10/06/16 10:58	EAF	TAL SPK
Total/NA	Analysis	8082A		1			8964	10/06/16 19:00	NMI	TAL SPK
Total/NA	Prep	3550C			3.04 g	5 mL	8975	10/06/16 13:42	EAF	TAL SPK

Client Sample ID: DP-20(1-2):092116 — **Lab Sample ID: 590-4572-21**
Date Collected: 09/21/16 10:40 — **Matrix: Solid**
Date Received: 09/23/16 12:10 — **Percent Solids: 98.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Dx		10			8992	10/07/16 13:32	NMI	TAL SPK

Client Sample ID: DP-21(1-2):092116 — **Lab Sample ID: 590-4572-22**
Date Collected: 09/21/16 11:00 — **Matrix: Solid**
Date Received: 09/23/16 12:10 — **Percent Solids: 97.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			3.05 g	5 mL	8971	10/06/16 10:58	EAF	TAL SPK
Total/NA	Analysis	8082A		1			8964	10/06/16 19:21	NMI	TAL SPK
Total/NA	Prep	3550C			3.06 g	5 mL	8975	10/06/16 13:42	EAF	TAL SPK
Total/NA	Analysis	NWTPH-Dx		10			8992	10/07/16 14:09	NMI	TAL SPK

Client Sample ID: DP-22(2-3):092116 — **Lab Sample ID: 590-4572-23**
Date Collected: 09/21/16 11:40 — **Matrix: Solid**
Date Received: 09/23/16 12:10 — **Percent Solids: 96.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			3.06 g	5 mL	8971	10/06/16 10:58	EAF	TAL SPK
Total/NA	Analysis	8082A		1			8964	10/06/16 19:42	NMI	TAL SPK
Total/NA	Prep	3550C			3.02 g	5 mL	8975	10/06/16 13:42	EAF	TAL SPK
Total/NA	Analysis	NWTPH-Dx		10			8992	10/07/16 14:27	NMI	TAL SPK

Client Sample ID: DP-23(1-2):092116 — **Lab Sample ID: 590-4572-24**
Date Collected: 09/21/16 12:15 — **Matrix: Solid**
Date Received: 09/23/16 12:10 — **Percent Solids: 98.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.215 g	10 mL	229455	10/10/16 10:00	JSM	TAL SEA
Total/NA	Analysis	8260C		1	1.075 mL	43 mL	229461	10/10/16 15:27	JSM	TAL SEA
Total/NA	Prep	3550C			3.14 g	5 mL	8971	10/06/16 10:58	EAF	TAL SPK
Total/NA	Analysis	8082A		1			8964	10/06/16 20:02	NMI	TAL SPK
Total/NA	Prep	3550C			3.13 g	5 mL	8975	10/06/16 13:42	EAF	TAL SPK
Total/NA	Analysis	NWTPH-Dx		10			8992	10/07/16 14:45	NMI	TAL SPK

Client Sample ID: DP-25(1-2):092116 — **Lab Sample ID: 590-4572-26**
Date Collected: 09/21/16 13:00 — **Matrix: Solid**
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			100.08 g	2000.01 mL	9020	10/10/16 09:06	JSP	TAL SPK
TCLP	Prep	3010A			50 mL	50 mL	9038	10/11/16 09:18	JSP	TAL SPK
TCLP	Analysis	6010C		1			9071	10/12/16 13:40	JSP	TAL SPK

Lab Chronicle

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-2

Client Sample ID: DP-33(1-2):092216

Lab Sample ID: 590-4572-35

Date Collected: 09/22/16 09:55
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			100.04 g	2000.05 mL	9020	10/10/16 09:06	JSP	TAL SPK
TCLP	Prep	3010A			50 mL	50 mL	9038	10/11/16 09:18	JSP	TAL SPK
TCLP	Analysis	6010C		1			9071	10/12/16 13:44	JSP	TAL SPK

Client Sample ID: DP-35(1.5-2.5):092216

Lab Sample ID: 590-4572-37

Date Collected: 09/22/16 11:20
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			3.05 g	5 mL	8971	10/06/16 10:58	EAF	TAL SPK
Total/NA	Analysis	8082A		1			8964	10/06/16 20:23	NMI	TAL SPK
Total/NA	Prep	3550C			3.16 g	5 mL	8975	10/06/16 13:42	EAF	TAL SPK
Total/NA	Analysis	NWTPH-Dx		10			8992	10/07/16 15:03	NMI	TAL SPK

Client Sample ID: DP-36(2-3):092216

Lab Sample ID: 590-4572-39

Date Collected: 09/22/16 11:50
Matrix: Solid
Date Received: 09/23/16 12:10
Percent Solids: 93.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			3.03 g	5 mL	8971	10/06/16 10:58	EAF	TAL SPK
Total/NA	Analysis	8082A		1			8964	10/06/16 20:43	NMI	TAL SPK
Total/NA	Prep	3550C			3.32 g	5 mL	8975	10/06/16 13:42	EAF	TAL SPK
Total/NA	Analysis	NWTPH-Dx		10			8992	10/07/16 15:21	NMI	TAL SPK

Client Sample ID: DP-38(2-3):092216

Lab Sample ID: 590-4572-41

Date Collected: 09/22/16 13:25
Matrix: Solid
Date Received: 09/23/16 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			100.09 g	2000.08 mL	9020	10/10/16 09:06	JSP	TAL SPK
TCLP	Prep	3010A			50 mL	50 mL	9038	10/11/16 09:18	JSP	TAL SPK
TCLP	Analysis	6010C		1			9071	10/12/16 13:48	JSP	TAL SPK

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TAL SPK = TestAmerica Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Certification Summary

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-2

Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-16
Washington	State Program	10	C569	01-06-17

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-17
California	State Program	9	2901	01-31-18
L-A-B	DoD ELAP		L2236	01-19-19
L-A-B	ISO/IEC 17025		L2236	01-19-19
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-16
US Fish & Wildlife	Federal		LE058448-0	10-31-16
USDA	Federal		P330-14-00126	04-08-17
Washington	State Program	10	C553	02-17-17

Method Summary

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-2

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL SEA
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL SPK
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	TAL SPK
6010C	Metals (ICP)	SW846	TAL SPK

Protocol References:

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TAL SPK = TestAmerica Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Fax (509) 924-9290

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Josh Lee	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-1806-651.1
Client Contact: JR Sugalski	Phone: 406-239-7810	E-Mail: randee.arrington@testamericainc.com		Page: Page 1 of 54
Company: GeoEngineers Inc				Job #:
Address: 523 East Second Ave	Due Date Requested:			
City: Spokane	TAT Requested (days): Std.			
State, Zip: WA, 99202				
Phone: 509-209-2830(Tel)	PO #: Purchase Order not required			
Email: jsugalski@geoengineers.com	WO #			
Project Name: Riverfront Park (00110-148-04)	Project #: 59000877			
Site: Riverfront Park	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

2.1°C

Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C	NWTPH - HCID	RCRA metals	PAH's 8270D - SIM	7471B-Hg	Total Number of containers
Preservation Code:												
DP-1 (0.5-1.5):092016	9/20/16	0850	G	S			X	X	X	X	X	3
DP-1 (3-4):092016	9/20/16	0900		S			X	X	X	X	X	3
DP-2 (0.5-1.5):092016	9/20/16	0920		S			X	X	X	X	X	3
DP-3 (0.5-1.5):092016	9/20/16	0950		S								1
DP-4 (1-2):092016	9/20/16	1030		S								
DP-5 (0.5-1.5):092016	9/20/16	1050		S								
DP-6 (1-2):092016	9/20/16	1110		S								
DP-7 (1.5-2.5):092016	9/20/16	1125		S								
DP-8 (0.5-1.5):092016	9/20/16	1145		S								
DP-9 (0.5-1):092016	9/20/16	1205		S								
DP-10 (1.5-2.5):092016	9/20/16	1345		S								

590-4572 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Josh Lee	9/23/2016 1210	GEI		9-23-16 1210	TASPK
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Fax (509) 924-9290

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: JML	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-1806-651.2
Client Contact: JR Sugalski	Phone: 406-239-7810	E-Mail: randee.arrington@testamericainc.com		Page: Page 2 of 3 4
Company: GeoEngineers Inc				Job #:
Address: 523 East Second Ave	Due Date Requested:			
City: Spokane	TAT Requested (days): Std.			
State, Zip: WA, 99202				
Phone: 509-209-2830(Tel)	PO #: Purchase Order not required			
Email: jsugalski@geoengineers.com	WO #:			
Project Name: Riverfront Park (00110-148-04) -06	Project #: 59000877			
Site: Riverfront Park	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C NWTPH-HCID	RCRA - 8	7471B - Hg	PAHs 8270D - SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:									2 PC
DP-11 (1-2): 092016	9/20/16	1400	G	S			X	X	X	X	3	
DP-12 (1-2): 092016	9/20/16	1420		S								
DP-13 (0-1): 092016	9/20/16	1440		S								
DP-14 (1-2): 092016	9/20/16	1515		S								
DP-15 (0.5-1.5): 092016	9/20/16	1530		S								
DP-16 (2-3): 092016	9/20/16	1550		S								
DP-17 (1-2): 092016	9/21/16	0905		S								
DP-18 (1.5-2.5): 092116	9/21/16	1000		S								
DP-19 (1.5-2.5): 092116	9/21/16	1020		S								
DP-20 (1-2): 092116	9/21/16	1040		S								
DP-21 (1-2): 092116	9/21/16	1100		S								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Josh Lee	9/23/2016 1210	GEI		9-23-16 1210	TASPK
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Fax (509) 924-9290

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: JML	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-1806-651.3
Client Contact: JR Sugalski	Phone: 406-239-7810	E-Mail: randee.arrington@testamericainc.com		Page: Page 3 of 4
Company: GeoEngineers Inc				Job #:

Address: 523 East Second Ave	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Spokane	TAT Requested (days): Std.		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: WA, 99202			
Phone: 509-209-2830(Tel)	PO #: Purchase Order not required		Other:
Email: jsugalski@geoengineers.com	WO #:		
Project Name: Riverfront Park (00110-148-04) -06	Project #: 59000877		
Site: Riverfrot Park	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOCs 8260C	NWTPH - HCID	RCRA w/o mercury	7471B - Hg	PAHs	Total Number of containers	Special Instructions/Note:
			Preservation Code:										2.1°C
DP-23 (1-2): 092116	9/21/16	1215	G	S				X	X	X	X	3	
DP-24 (1-2): 092116	9/21/16	1230		S									
DP-25 (1-2): 092116	9/21/16	1300		S									
DP-26 (1.5-2.5): 092116	9/21/16	1440		S									
DP-27 (1.5-2.5): 092116	9/21/16	1500		S									
DP-28 (1-2): 092116	9/21/16	1540		S									
DP-29 (1.5-2.5): 092116	9/21/16	1605		S									
DP-29 (10-11): 092116	9/21/16	1610		S									
DP-30 (1.5-2.5): 092116	9/21/16	1630		S									
DP-31 (2-3): 092216	9/22/16	0830		S									
DP-32 (1.5-2.5): 092216	9/22/16	0930		S									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Josh Lee	Date/Time: 9/23/2016 1210	Company: GEI	Received by:	Date/Time: 9-23-16 1210	Company: TA Spk
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Fax (509) 924-9290

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: JML	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-1806-651.4
Client Contact: JR Sugalski	Phone: 406-239-7816	E-Mail: randee.arrington@testamericainc.com		Page: Page 4 of 84

Company: GeoEngineers Inc
Address: 523 East Second Ave
City: Spokane
State, Zip: WA, 99202
Phone: 509-209-2830(Tel)
Email: jsugalski@geoengineers.com
Project Name: Riverfront Park (00110-148-04)
Site: Riverfront Park

Due Date Requested:
TAT Requested (days): Std.
PO #: Purchase Order not required
WO #:
Project #: 59000877
SSOW#:

Job #:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Special Instructions/Note: 2.1°C

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOCs 8260C	NWTPH - HCID	RCRA w/o nnc	7471B - Hg	PAHs	Total Number of containers
			Preservation Code:									
DP-33(1-2)092216	9/22/16	0955	G	S			X	X	X	X		3
DP-34(1.5-2.5)092216	9/22/16	1100		S								3
DP-35(1.5-2.5)092216	9/22/16	1120		S								3
DP-35(10-11)092216	9/22/16	1125		S								3
DP-36(2-3)092216	9/22/16	1150		S								3
DP-37(10-11)092216	9/22/16	1200		S								3
DP-38(2-3)092216	9/22/16	1325		S								3
DP-38(6-7)092216	9/22/16	1330		S								3
DP-39(2-3)092216	9/22/16	1345		S								3
DP-40(10.5-11.5)092216	9/22/16	1410		S								3
DP-22(2-3)092116	9/21/16	1140		S								3

List in order on report

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Josh Lee	9/23/2016 1210	GEI		9-23-16 1210	TA-SPK
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Fax (509) 924-9290

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-2149.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: randee.arrington@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Analysis Requested		Job #: 590-4572-2
Address: 5755 8th Street East,	Due Date Requested: 10/12/2016			Preservation Codes:
City: Tacoma	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: WA, 98424	PO #:			
Phone: 253-922-2310(Tel) 253-922-5047(Fax)	WO #:			Other:
Email:	Project #: 59000877			
Project Name: Riverfront Park (00110-148-06)	SSOW#:			
Site:				

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C/5035A_FM Volatiles, standard list	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DP-16(2-3):092016 (590-4572-17)	9/20/16	15:50 Pacific		Solid			X	2	
DP-23(1-2):092116 (590-4572-24)	9/21/16	12:15 Pacific		Solid			X	2	

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Sheila Kraly	10/6/16 1450	TAOMK	Tom Blankenship	10/7/16 0925	TA-Sea
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: A2 1.9/2.1

Login Sample Receipt Checklist

Client: GeoEngineers Inc

Job Number: 590-4572-2

Login Number: 4572

List Source: TestAmerica Spokane

List Number: 1

Creator: Williams, Chris B

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GeoEngineers Inc

Job Number: 590-4572-2

Login Number: 4572
List Number: 2
Creator: Blankinship, Tom X

List Source: TestAmerica Seattle
List Creation: 10/07/16 04:42 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.9°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Tel: (509)924-9200

TestAmerica Job ID: 590-4572-3
Client Project/Site: Riverfront Park (00110-148-06)

For:
GeoEngineers Inc
523 East Second Ave
Spokane, Washington 99202

Attn: JR Sugalski

Authorized for release by:
11/4/2016 4:53:11 PM

Randee Arrington, Project Manager II
(509)924-9200
randee.arrington@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-3

Job ID: 590-4572-3

Laboratory: TestAmerica Spokane

Narrative

Receipt
The samples were received on 9/23/2016 12:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1º C.

Receipt Exceptions
The following sample was activated for TCLP 6010C Chromium analysis by the client on 11/02/2016: DP-26(1.5-2.5):092116 (590-4572-27). This analysis was not originally requested on the chain-of-custody (COC).

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-4572-27	DP-26(1.5-2.5):092116	Solid	09/21/16 14:40	09/23/16 12:10

Definitions/Glossary

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-3

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-3

Client Sample ID: DP-26(1.5-2.5):092116
Date Collected: 09/21/16 14:40
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-27
Matrix: Solid

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.0047	J	0.025	0.0021	mg/L		11/04/16 09:23	11/04/16 14:59	1

Method: 6010C - Metals (ICP)

Lab Sample ID: LCS 590-9445/1-A
Matrix: Solid
Analysis Batch: 9461

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9445

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium			1.00	0.963		mg/L		96	80 - 120		

Lab Sample ID: MB 590-9422/1-B
Matrix: Solid
Analysis Batch: 9461

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 9445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.025	0.0021	mg/L		11/04/16 09:23	11/04/16 14:56	1

Lab Chronicle

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-3

Client Sample ID: DP-26(1.5-2.5):092116
Date Collected: 09/21/16 14:40
Date Received: 09/23/16 12:10

Lab Sample ID: 590-4572-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			100.75 g	2000.32 mL	9422	11/03/16 09:21	JSP	TAL SPK
TCLP	Prep	3010A			50 mL	50 mL	9445	11/04/16 09:23	JSP	TAL SPK
TCLP	Analysis	6010C		1			9461	11/04/16 14:59	JSP	TAL SPK

Laboratory References:

TAL SPK = TestAmerica Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Certification Summary

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-3

Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-17
Washington	State Program	10	C569	01-06-17

Method Summary

Client: GeoEngineers Inc
Project/Site: Riverfront Park (00110-148-06)

TestAmerica Job ID: 590-4572-3

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL SPK

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SPK = TestAmerica Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Fax (509) 924-9290

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Josh Lee	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-1806-651.1
Client Contact: JR Sugalski	Phone: 406-239-7810	E-Mail: randee.arrington@testamericainc.com		Page: Page 1 of 54
Company: GeoEngineers Inc				Job #:

Address: 523 East Second Ave	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Spokane	TAT Requested (days): Std.		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: WA, 99202			
Phone: 509-209-2830(Tel)	PO #: Purchase Order not required		
Email: jsugalski@geoengineers.com	WO #		Other:
Project Name: Riverfront Park (00110-148-04)	Project #: 59000877		
Site: Riverfront Park	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C	NWTPH - HCID	RCRA metals	PAH's 8270D - SIM	7471B - Hg	Total Number of containers	Special Instructions/Note:
			Preservation Code:										2.1°C
DP-1 (0.5-1.5):092016	9/20/16	0850	G	S			X	X	X	X	X	3	
DP-1 (3-4):092016	9/20/16	0900		S			X	X	X	X	X	3	
DP-2 (0.5-1.5):092016	9/20/16	0926		S			X	X	X	X	X	3	
DP-3 (0.5-1.5):092016	9/20/16	0950		S								1	
DP-4 (1-2):092016	9/20/16	1030		S									
DP-5 (0.5-1.5):092016	9/20/16	1050		S									
DP-6 (1-2):092016	9/20/16	1110		S									
DP-7 (1.5-2.5):092016	9/20/16	1125		S									
DP-8 (0.5-1.5):092016	9/20/16	1145		S									
DP-9 (0.5-1):092016	9/20/16	1205		S									
DP-10 (1.5-2.5):092016	9/20/16	1345		S									

590-4572 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Josh Lee	9/23/2016 1210	GEI		9-23-16 1210	TASPK
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Fax (509) 924-9290

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: JML	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-1806-651.2
Client Contact: JR Sugalski	Phone: 406-239-7810	E-Mail: randee.arrington@testamericainc.com		Page: Page 2 of 3 4
Company: GeoEngineers Inc				Job #:
Address: 523 East Second Ave	Due Date Requested:			
City: Spokane	TAT Requested (days): Std.			
State, Zip: WA, 99202				
Phone: 509-209-2830(Tel)	PO #: Purchase Order not required			
Email: jsugalski@geoengineers.com	WO #:			
Project Name: Riverfront Park (00110-148-04) -06	Project #: 59000877			
Site: Riverfront Park	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Special Instructions/Note: 2 PC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C NWTPH-HCID	RCRA - 8	7471B - Hg	PAHs 8270D - SIM	Total Number of containers
Preservation Code:											
DP-11 (1-2): 092016	9/20/16	1400	G	S			X	X	X	X	3
DP-12 (1-2): 092016	9/20/16	1420		S							
DP-13 (0-1): 092016	9/20/16	1440		S							
DP-14 (1-2): 092016	9/20/16	1515		S							
DP-15 (0.5-1.5): 092016	9/20/16	1530		S							
DP-16 (2-3): 092016	9/20/16	1550		S							
DP-17 (1-2): 092016	9/21/16	0905		S							
DP-18 (1.5-2.5): 092116	9/21/16	1000		S							
DP-19 (1.5-2.5): 092116	9/21/16	1020		S							
DP-20 (1-2): 092116	9/21/16	1040		S							
DP-21 (1-2): 092116	9/21/16	1100		S							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Josh Lee	9/23/2016 1210	GEI		9-23-16 1210	TASPK
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Fax (509) 924-9290

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: JML	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-1806-651.3
Client Contact: JR Sugalski	Phone: 406-239-7810	E-Mail: randee.arrington@testamericainc.com		Page: Page 3 of 4
Company: GeoEngineers Inc				Job #:

Address: 523 East Second Ave	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Spokane	TAT Requested (days): Std.		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: WA, 99202			
Phone: 509-209-2830(Tel)	PO #: Purchase Order not required		Other:
Email: jsugalski@geoengineers.com	WO #:		
Project Name: Riverfront Park (00110-148-04) -06	Project #: 59000877		
Site: Riverfrot Park	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOCs 8260C	NWTPH - HCID	RCRA w/o mercury	7471B - Hg	PAHs	Total Number of containers	Special Instructions/Note:
			Preservation Code:										2.1°C
DP-23 (1-2): 092116	9/21/16	1215	G	S				X	X	X	X	3	
DP-24 (1-2): 092116	9/21/16	1230		S									
DP-25 (1-2): 092116	9/21/16	1300		S									
DP-26 (1.5-2.5): 092116	9/21/16	1440		S									
DP-27 (1.5-2.5): 092116	9/21/16	1500		S									
DP-28 (1-2): 092116	9/21/16	1540		S									
DP-29 (1.5-2.5): 092116	9/21/16	1605		S									
DP-29 (10-11): 092116	9/21/16	1610		S									
DP-30 (1.5-2.5): 092116	9/21/16	1630		S									
DP-31 (2-3): 092216	9/22/16	0830		S									
DP-32 (1.5-2.5): 092216	9/22/16	0930		S									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Josh Lee	9/23/2016 1210	GEI		9-23-16 1210	TA Spk
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

11/4/2016

TestAmerica Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Fax (509) 924-9290

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: JML	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-1806-651.4
Client Contact: JR Sugalski	Phone: 406-239-7816	E-Mail: randee.arrington@testamericainc.com		Page: Page 4 of 84
Company: GeoEngineers Inc				Job #:
Address: 523 East Second Ave	Due Date Requested:			
City: Spokane	TAT Requested (days): Std.			
State, Zip: WA, 99202				
Phone: 509-209-2830(Tel)	PO #: Purchase Order not required			
Email: jsugalski@geoengineers.com	WO #:			
Project Name: Riverfront Park (00110-148-04)	Project #: 59000877			
Site: Riverfront Park	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOCs 8260C	NWTPH - HCID	RCRA w/o mne	7471B - Hg	PAHs	Total Number of containers	Special Instructions/Note:
			Preservation Code:										Z. 10C
DP-33(1-2)092216	9/22/16	0955	G	S			X	X	X	X		3	
DP-34(1.5-2.5)092216	9/22/16	1100		S								3	
DP-35(1.5-2.5)092216	9/22/16	1120		S								3	
DP-35(10-11)092216	9/22/16	1125		S								3	
DP-36(2-3)092216	9/22/16	1150		S								3	
DP-37(10-11)092216	9/22/16	1200		S								3	
DP-38(2-3)092216	9/22/16	1325		S								3	
DP-38(6-7)092216	9/22/16	1330		S								3	
DP-39(2-3)092216	9/22/16	1345		S								3	
DP-40(10.5-11.5)092216	9/22/16	1410		S								3	
DP-22(2-3)092116	9/21/16	1140		S								3	List in order on report

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Josh Lee	9/23/2016 1210	GE-T		9-23-16 1210	TA-SPK
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

11/4/2016

Login Sample Receipt Checklist

Client: GeoEngineers Inc

Job Number: 590-4572-3

Login Number: 4572
List Number: 1
Creator: Williams, Chris B

List Source: TestAmerica Spokane

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

APPENDIX C
Report Limitations and Guidelines for Use

APPENDIX C
REPORT LIMITATIONS AND GUIDELINES FOR USE[1]

This appendix provides information to help you manage your risks with respect to the use of this report.

Environmental Services Are Performed for Specific Purposes, Persons and Projects

GeoEngineers has performed this assessment of the Spokane Riverfront Park site in Spokane Washington in accordance with the Work Plan dated September 16, 2016. This report has been prepared for the exclusive use of the City of Spokane, Washington. This report is not intended for use by others, and the information contained herein is not applicable to other properties.

GeoEngineers structures our services to meet the specific needs of our clients. For example, an Environmental Site Assessment (ESA) study conducted for a property owner may not fulfill the needs of a prospective purchaser of the same property. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and property. No one except the Washington Department of Ecology should rely on this environmental report without first conferring with GeoEngineers. Use of this report is not recommended for any purpose or project except the one originally contemplated.

This Environmental Report is Based on a Unique Set of Project-Specific Factors

This report has been prepared for the Spokane Riverfront Park site in Spokane Washington. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this project and report. Unless GeoEngineers specifically indicates otherwise, it is important not to rely on this report if it was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

If important changes are made to the project or property after the date of this report, we recommend that GeoEngineers be given the opportunity to review our interpretations and recommendations. Based on that review, we can provide written modifications or confirmation, as appropriate.

Reliance Conditions for Third Parties

Our report was prepared for the exclusive use of our Client. No other party may rely on the product of our services unless we agree to such reliance in advance and in writing. This is to provide our firm with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions. Within the limitations of scope, schedule and budget, our services

1 Developed based on material provided by ASFE, Professional Firms Practicing in the Geosciences; www.asfe.org.

have been executed in accordance with our Agreement with the Client and generally accepted environmental practices in this area at the time this report was prepared.

Environmental Regulations Are Always Evolving

Some substances may be present in the vicinity of the subject property in quantities or under conditions that may have led, or may lead, to contamination of the subject property, but are not included in current local, state or federal regulatory definitions of hazardous substances or do not otherwise present current potential liability. GeoEngineers cannot be responsible if the standards for appropriate inquiry, or regulatory definitions of hazardous substances, change or if more stringent environmental standards are developed in the future.

Uncertainty May Remain Even After This Phase II ESA is Completed

Performance of a Phase II ESA is intended to reduce uncertainty regarding the potential for contamination in connection with a property, but no ESA can wholly eliminate that uncertainty. Our interpretation of subsurface conditions in this study is based on field observations and chemical analytical data from widely spaced sampling locations. It is always possible that contamination exists in areas that were not explored, sampled or analyzed.

Subsurface Conditions Can Change

This environmental report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by man-made events such as construction on or adjacent to the subject property, by new releases of hazardous substances, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Please contact GeoEngineers before applying this report for its intended purpose so that GeoEngineers may evaluate whether changed conditions affect the continued applicability of the report.

Soil End Use

The cleanup criteria referenced in this report are site- and situation-specific. The cleanup criteria may not be applicable for other properties or for other on-site uses of the affected soil. Note that hazardous substances may be present in some of the on-site soil at detectable concentrations that are less than the referenced cleanup criteria. GeoEngineers should be contacted prior to the export of soil from the subject property or reuse of the affected soil on-site to evaluate the potential for associated environmental liabilities. We are unable to assume responsibility for potential environmental liability arising out of the transfer of soil and from the subject property to another location or its reuse on-site in instances that we did not know or could not control.

Most Environmental Findings Are Professional Opinions

Our interpretations of subsurface conditions are based on field observations and chemical analytical data from widely spaced sampling locations at the subject property. Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoEngineers reviewed field and laboratory data and then applied our professional judgment to render an informed opinion about subsurface conditions throughout the property. Actual subsurface conditions may differ, sometimes significantly, from those indicated in this report. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.

Do Not Redraw the Exploration Logs

Environmental scientists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in an environmental report should never be redrawn for inclusion in other design drawings. Only photographic or electronic reproduction is acceptable, but separating logs from the report can create a risk of misinterpretation.

Read These Provisions Closely

It is important to recognize that the geoscience practices (geotechnical engineering, geology and environmental science) are less exact than other engineering and natural science disciplines. Without this understanding, there may be expectations that could lead to disappointments, claims and disputes. GeoEngineers includes these explanatory "limitations" provisions in our reports to help reduce such risks. Please confer with GeoEngineers if you need to know more about how these "Report Limitations and Guidelines for Use" apply to your project or property.

Biological Pollutants

GeoEngineers' Scope of Work specifically excludes the investigation, detection, prevention or assessment of the presence of Biological Pollutants. Accordingly, this report does not include any interpretations, recommendations, findings or conclusions regarding the detecting, assessing, preventing or abating of Biological Pollutants, and no conclusions or inferences should be drawn regarding Biological Pollutants as they may relate to this project. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria and viruses, and/or any of their byproducts.

A Client that desires these specialized services is advised to obtain them from a consultant who offers services in this specialized field.

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